







y Apple?

One day we all hope to see the rebirth of the Amiga with a PowerPC processor and other new features to enable it to compete again with today's systems. Sadly though, more than 2 years since Commodore's demise, little of substance has actually happened. We've seen. prototypes and heard promises. we all hope to see new Amiga developments.

If you can't wait and need more performance today, without paying the earth - there's only one real alternative to consider... There's never been a better time to think Apple!



Only Apple offer you both desktop and portable computers that truly match the ease of use the Amiga brought to your desktop. Affordable Apple Macintosh systems have PowerPC RISC processors with thousands of off-the-shelf programs available in areas where the Amiga was always previously so strong.

And, if you need the most compatible of all computers. Macintosh is currently the only system that can run MacOS, DOS and Windows applications via optional DOS Cards or SoftWindows software.



 Groller Multimedia Encyclopaecia - DK's Ultimate Human Body - Sammy's Science House
 Thinkin' Things 3 - Full Throttle - PowerPete - The Best of European Soccer
 Claris Works - HyperCard Player - Acrobat Reader - MacLink Plus - At Ease · Apple Internet Connection Kit · Apple Telecom 3.0

PLUS XTRA SOFTWARE... . Apple Magic Software Collection by Disney and . Descent



comprising of an Integrated collection of Apple and third party software needed to connect directly to the Internet easily! Perfect solution for Mac users who want Internet access today! reduces modern for Mac)





 KAI's Power Goo
 Avid Cinema
 Cubase AV
 Dabbler Adobe PageMill
 Adobe PhotoDeluxe
 3D World

SHOWN BELOW IS JUST A SMALL SELECTION FROM THE VAST RANGE OF APPLE MACINTOSH COMPUTERS WHICH ARE CURRENTLY AVAILABLE

						*****			SAME.					
Model	MHz	CPU	RAM	HD	ZP	CD	Display	TV/Text	Video	AVID	Modern	Keyboard	Price	Software Pack
PM5400	180	603e	16	2.0Gb	x	V8	15" Integral	x	×	×	₹28.8	Design	£999	FAMILY PACK
PM5500 Black Mac	225	603e	32	2.0Gb	x	V12	15" Integral	V	V	×	✓ 33.6	Design	£1820	FAMILY PACK
PM6400	200	603e	16	2.4Gb	x	V8	15" AV 1.05	×	x	x	√ 28.8	Design	£1292	HOME OFFICE
PM6500	250	603e	32	3.0Gb	x	V12	15" AV M/S	x	×	×	₹ 33.6	Design	£1938	HOME OFFICE
PM6500	275	603e	32	4.0Gb	×	V12	15" AV M/S	~	V	~	√ 33.6	Design	£2525	CREATIVE STUDIO
PM4400	200	603e	16	1.265	×	V8	15" M5	×	x	×	x	Design	£1280	x
PM7300	166	604e	16	2.0Gb	×	V12	x	×	×	×	×	Extended	£1643	×
PM8600	200	604e	32	2.0Gb	V	V12	×	×	x	×	X	Extended	£2407	×
PM9600	233	604e	32	4 0Gb	×	V12	×	×	x	×	x	Extended	£2819	×
11113000	***	-		-000		100								

SHOWN BELOW IS JUST A SMALL SELECTION FROM THE HUGE RANGE OF POWERBOOK MACINTOSH COMPUTERS CURRENTLY AVAILABLE

1400cs/117 12/1000, DS	£1350
1400cs/117 16/1000, DS, CD	£1585
1400cs/117 16/1000, DS, CD, StyleWriter 2200, Carry Case	£1761
1400c/133 16/1300, AM, CD	£2583
3400c/180 16/1300, AM	£2936
3400c/180 16/1300, AM, 12 Speed CD, Ethernet	£3171
3400c/200 32/2000, AM, 12 Spd CD, Ethernet, SoftWindows 3.11	£4111
3400c/240 16/3000, AM, 12 Speed CD, Ethernet	£4699

SHOWN BELOW IS JUST A SMALL SELECTION OF NEWTON HANDHELD MESSAGEPAD

Newton 2000 Carry Case Newton 2000 Carry Case with room for K Newton 2000 AC Adaptor	Leyboard £7
Newton 2000 AC Adaptor	
	f3
Newton 2000 Battery Pack	£2
Newton 2000 4Mb Flash Upgrade	£10
Newton 2000 Keyboard	£7
ALL current Newton models available	

• FAMILY PACK software is as detailed above (see 5400/180 offer) • CREATIVE STUDIO software is as detailed above (see 6500/275 offer) • HOME OFFICE software pack includes all the 'Family Pack' software PLUS... Claris impact and Claris Organiser

		····• Please send the coupon or phone us - we ii	rush you your FREE why macmush brochure pack		
Mr/Mrs/Miss/Ms: Initial(s): Surname:		Surname:	Daytime Phone:	Evening Phone:	
Address:			Main use(s) of computer: HOME	BUSINESS EDUCATION	
			Current computer and accessories:		
County or Country:		Postcode:			

Please cut out the coupon and return it FREE to.

· Why Macintosh? · · · ·

Performance:

All Macs are PowerPC based. Even entry level desktop systems run at 160MHz or 180MHz, with 275MHz powerhouses and 200 MHz multi-processor systems at the top of the range. Even portables offer 240MHz!



Apple is the only mainstream computer company who has been able to make the transition from the older CISC (complex instruction set computing) processors to the newer and faster

RISC (reduced instruction set computing) processor technology - whilst still retaining full backward compatibility with previous software. Remember 486, Pentium/Pro & 680X0 are merely CISC



Software choice:

Over 1,800 native software packages (written specially for PowerPC Processor Macs) have been shipped since Power Macs were launched in 1994 - plus there are thousands of existing programs which can also be used. Industry standard programs such as Word, Pagestream, Word Perfect, Page FileMaker Pro. Excel, Quark Xpress, Photoshop and many others have all been developed for the Mac

Creativity:

· Macintosh still dominates the creative world with an 80% market share in colour publishing



- · 65% of post-production video editing is on Macs
- · Macintosh is the most widely used system for the creation of Internet web pages.
- · Most magazines (probably the one you're reading right now) are created on Macintosh

Multimedia:

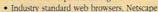
MONITORS.

- · Apple is the World's No. 1 Multimedia
- · All desktop Macs have a fast CD-ROM drive as standard (many portables have internal CDs too)
- . In 1995, 42 of the top 50 selling CD-ROM titles worldwide were developed on the Macintosh.
- · Many Macintoshes have built-in TV with teletext so TV clips can be recorded directly to disk as QuickTime movies
- · Many Macintoshes have built-in video in and out, for direct recording to VCRs.
- · Several Macintoshes have internal digital video editing facilities as standard and many others can be upgraded to include this facility with ease.



The Internet & Communication:

· All Macs are Internet ready; many include a 28.8 or 33.6 modem with full send/receive INTE fax and answerphone management facilities.



Navigator and Microsoft Internet Explorer were developed for the Mac. Both give full access to all Web sites with new Internet page layout Ki . features like auto-tables and on-screen movies.

. The Internet's standard format for video files, called QuickTime, or QuickTime for Windows, are both Apple products. Of course QuickTime comes as standard with every Mac.

Connectivity & Expandability:

- · All Macintoshes have networking built in as standard. so connecting systems together and adding shared printers etc. couldn't be easier.
- · All Macintoshes have an external SCSI connector as standard - adding external drives, cartridge drives, scanners etc. really is Plug-and-Play
- · Low-cost digital cameras can be plugged into the Mac for instant real image input.
- · Inexpensive industry standard PCI cards can be used in all desktop Mac systems.

Education & Edutainment:

Many quality Macintosh titles are widely available. Dorling Kindersley offer superb titles like The Ultimate Human Body and History of the World whilst Microsoft



publish Encarta, Cinemania and Dinosaurs. Because Macintosh is the preferred system within many educational establishments, high quality software is assured.

Recreation & Games:



· Top games like The Ultimate Doom, Myst, Rebel Assault II, Dark Forces, Descent, Afterlife, Lost Eden, Legend of Kyrandia, Full Throttle and The Dig have all been developed for Macintosh

Output & Presentation:

- Connecting and using colour printers (from Epson, HP, Apple and others) to Macs is so easy and the results are truly outstanding.
- Many software packages are available offering image manipulation and superb photo quality output.



...... PERIPHERALS

GRAPHICS TABLET.

Apple 13" AV MultiSync	£469	Wacom Artrad a with Daddler	T110
Apple 17 1710AV TCO Multisync	£645	STORAGE	
Apple 20" MultiSync II	£1056	D2 Quantum 2,1Gb External HD	£293
ASER PRINTERS		EZZ30 Syquest Drive inc. Cart.	£163
	1	D2 JAZ Drive inc. Cartridge	£351
Apple LaserWriter 4/600PS - A4, 600dpi	£586	D2 2400e 16 Speed CD Drive	£234
IP LaserJet 6MP - A4, 600dpi	£727	Micronet 2400E CD Drive	£234
Apple LaserWriter 12/640PS - A4, 600dpi	£939	(with 5 great software titles)	
NKJET PRINTERS		COMMS	
Apple StyleWriter 1500 A4 Colour	£116		£135
pple StyleWriter 2500 A4 Colour	£175	(33.6, inc. Global Transfer s/ware	
anon BJC 4550 A3 Colour	£352	(33.0, IIIC. Global Halislei Siwale	
		Accresoning	
pson Stylus 600 A4 Colour	£269	ACCESSORIES	
pson Stylus 800 A4 Colour	£387	Apple Design Speakers II	£58
pson Stylus Photo 6 Colour	£410	Macally Joystick	£38
pson Stylus 1520 A2Colour	£704	Macally Gamepad	£26

Epson Stylus 600 A4 Colour	1269	ACCESSORIES	
Epson Stylus 800 A4 Colour	£387	Apple Design Speakers II	£58
Epson Stylus Photo 6 Colour	£410	Macally Joystick	£38
Epson Stylus 1520 A2Colour	£704	Macally Gamepad	£26
		FlightStick Pro Joystick	£80
CAMERAS		Gravis Firebird Joystick	£100
Apple QuickTake 200	£445	Jetstick	£45
Kodak DC20	£187	Apple One Year On-Site	£18
		Maintenance Warranty	
SCANNER			
UMAX Astra 600S - PhotoShop LE	£206	LOTS MORE PERIPHERAL	S - CALL!

SOFTWARE

RAPHICS SOFTWARE		EDUCATION SOFTWARE	
uark Xpress 3.3	£763	Groler's Encylopaedia	EBS.
ageMaker 6.5	£469	Dorling Kindersley	
ustrator 7.0	£328	20th Century Chronicle	£28
notoShop 4 0	£469	The Way Things Work 2.0	£28
PT/MetaTool Actions	£52	Encyc. of Space & The Universe	£28
tetaTools Soap	E58	Ultimate 3D Skeleton	£21
I Bryce i	£163	Ultimate Human Body 2 0	£28
PT Gool	£49	Virtual Reality - Cat, Bird,	£224a.
teHand 7.0	1363	Dinosaur Hunter or Earth Quest	
len Skin Eyecandy 3.0	£89	Encyclopaedia of Science 2.0	£28
oreiDraw Stitle Upgrade	£116	World Reference Atlas	£35
USINESS		Think and Talk	£52ea.
licrosoft Office 4.2	£422	German, Italian, Spanish or French	
icrosoft Word 6.9	£288	Reading Development	£2948.
ians Works 4 Internet	£88	Series 1, 2, 3 or 4	
lars Works to MS Office U/g	£210	Teach Yourself Calculus	£22
lars Em@ler 2.0	£49	Music Central	£28
ars Organiser 20	£69	Thinkin' Things 3	£16
YOB (Accounts) 5.0	£175	LEISURE SOFTWARE	
oftWindows 3.0 ICD/3.5*1	£88	Actua Soccer	£29
ftWindow '95 40 - CD	£129	SIM City 2000 CD Collection	E39
TILITY SOFTWARE		Warcraft 1	£33
orton 3.5	£87	39 Landscape 2	£48
ter Dark 4.0 CD	£19	FA/18 Hornet 3.0	£51
tobe Acrobat Pro	£187	Tonns Passage	E32
Soloman's (with 1Yr (Vg)	£63	Wing Commander IV	£43
LM Doubler 2.0	£41	Marathon infinity	£42
eed Doubler 2.0	£41	BOOKS - Full Range, Call for det	rils

♦ BUSINESS FINANCE: ♦

Weekly finance prices are exclusive of VAT and are based on 3 year fixed cost Apple Commercial Credit Lease for business users

Finance is also available for individuals visiting our showrooms and paying a minimum of 10% deposit.

'Deferred Payment Plan'

- · It's easy to buy your Mac with a
- GH Personal Finance Option
- · Ask for details of one to suit you Example... Pay 10% Deposit on a
- balance over £1200 and then pay nothing for 4 months (subject to status and £18 arrangement fee).
- · Written details are available on

AT GH WE MAKE EVERYTHING EASY...

PHONE GH...
We welcome all major credit/debit cards with NO TRANSACTION SURCHARGES.

ORDERING BY POST OR FAX...

Address and preferably daytime and/or evening phone or as daters and preferably debidoedit card include its number (also issue number with Switch cards). Please make checurs or PO's payable to... Gordon Harwood Computers Limited.

GH PRICES...

GH WARRANTY.

ALL PRICES INCLUDE VAT and are shown for personal users only. Business users please

Why not visit our showroom and see a range of Macintosh products on demonstration...

AN EASY DRIVE FROM MOST AREAS, We're open Mon to Sat - 9.00am until 5.00pm

PLEASE CALL TO CONFIRM AVAILABILITY BEFORE MAKING A LONG JOURNEY TO VISIT US

·····Why Harwoods?·····

Gordon Harwood Computers was founded as a specialist Commodore dealer in 1982 and we're still supporting Amiga users today. We began supplying Macintosh systems in 1991, when a became clear that Commodore was falling to capitalise on the technological advantage it had. We needed to have products available that fulfilled the needs of our customers who were demanding.

- Systems with outstanding performance Systems with unsurpassed ease of use
- Systems without the problems and disadvantages associated with DOS/Windows, which still persist and trouble users even now

Today we have grown to become one of the largest Apple Authorised Resellers in Europe. Our extensive product knowledge and solid support facilities emphasise our status as one of a select group of Apple Authorised Service Centres and accredited Apple Higher and Further Education Alliance Resellers.

We've been providing Commodore products since 1982 and today

harwood

GH 15TH ANNIVERSARY

1982-199

supply a range of 100% Motorola based systems including Blizzard and Cyberstorm along with video products and other peripherals...



are fully Security Checked

OFFICIAL ORDERS... pply Central, Local Govern

and Education Departments along

'FAST-FAX'... on 01773 831040 for a Rapid

nse to your Quotati



GORDON HARWOOD COMPUTERS DEPT. ACO /4 • NEW STREET
ALFRETON • DERBYSHIRE

DESS 7BP Tel: 01773 836781 FAX: 01773 831040

This advertisement is an inustation to treat, not an offer to sell. Goods are not supplied on a trial basis. All transactions are subject to Harwood's Terms and Conditions of Sale, a copy of which is available on request. All Trademarks are acknowledged. ESO.E.



ACTION NEWS

I'm sure there is some games news this month, exactly what I cannot say. Perhaps turning to page 52 might help

CIVILISATION

Hugh is a man in control of his own destiny, now whether he should be in control of anyone else's is another question

54

56

62

65

LIVE MEDIA INTERVIEW

Last month's we had news on a company bringing Mac games to the Amiga, now we probe the developers

SHADOW OF THE 3RD MOON 60

Bloody hell, that heading only just fits in. Why can't they give games proper names anymore, no matter how good it looks

BIG RED ADVENTURE

Part two of part one, crack this great adventure with Amiga Actions continuing solution type guide thing

DUKE 3D

Duke Nuke 'Em on the Amiga surely not! Well no, but being able to walk around any Duke level is a damn good start in my book



GUNSHIP 2000

Now I'm sure there will be mention of Hugh's big chopper at some point, so there I got it out the way right at the start, ooh err misses, f'nar f'nar, nudge nudge

SIX SENSE

A brand new game! Can you believe it, those crazy East Europeans they must be on drugs

MINI OFFICE

Has Guildhall over stretched itself by stepping into the world of serious software with this latest re-release of Eurosoft's Mini Office?



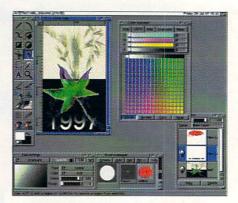
NEW YORK

Just what the Amiga world needs right now, a brand new newsgroup reader, joy and rapture

EATURES

ART EFFECT 2

Neil Mohr gets all arty which makes a change because he is normally he is just farty. This latest version get put through the mangler until all the nasty bits show up



BROWSER WAR

It's time to stand up and be counted, Amiga Computing takes the latest three versions of iBrowse, Voyager and AWeb to see which on comes out on top

SASG

14

After being around for three years and a year on-line, the standard Amiga software group provided virtually every possible form of software ordering under the sun

18

21

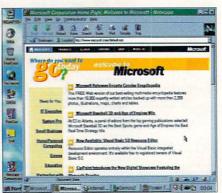
POSTSCRIPT_

Have ever wanted to display or print off a Postscript document? Well now you can, and for next to nothing to boot



WINTEL WORLD

Dave Cusick is not generally known for being an aggressive type, but this month he's kicking arse with his size tens



AMIGA COMPUTING OCTOBER 1997

COVERDISK

MAGNUM OPUS 2

The ultimate add-on for Directory Opus 5 users. Every file type, icon and backdrop you would ever need is in this massive collection

Includes:

Action Cow - Have your own cow, mooooooo Big Red Adventure - Complete solution MountDOS - Mount PC hard drives MUILoad - Preloads all your MUI libraries



WaitGUI - GUI replacement for the wait command Super83 - Top Super72 replacement VisualPrefs - Configure Workbench's looks MultiView - Multi-filetype viewer front end

OVER STORY

THAT'S ALL FOLKS!

Time and tide wait for no man, and sadly Amiga Computing must pass on, to a better place. Enjoy the final issue as we walk off towards the light/pub...



NEWS

Controversy! Gateway 2000 is disputing the sale of Amiga patents to a Far East company by another company, read all about it here

ESP

A final look back over letters from the last nine years of Amiga Computing, but not the one from that American nutter woman

ACAS

35

Top 10 tips for a better computing life, you won't find better anywhere else



PUBLIC SECTOR

39

Sniff, Dave Cusick has been getting all teary eyed in the final Public Sector ever, waaaaah

MIGA GUIDE



Techno Sound Turbo 2 Pro is reviewed once again by Paul Overaa



Random access to files is always good and Paul Overaa loves it too



Tables baby, learn them, use them, love 'em. What more do you need?



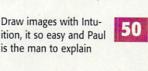
49

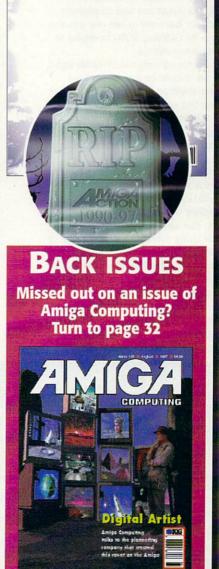


Translating C to assembler is easy, Paul Overaa show you with ByteRun 1 compression

Draw images with Intu-

is the man to explain





t's kind of odd, here I am, two years to the day that I started working on Amiga Computing, From lowly cover disk editor to editor to ex-editor in under 18 months. It seems a little ironic that at a time where there is more optimism and possibilities for positive change in the Amiga world that Amiga Computing should close.

As I write, the PowerPC boards are just beginning to ship. They have yet to prove themselves, but at least they should provide a stop gap until a true PowerPC machine can be developed.

To me, the Amiga story is littered with missed opportunities and broken promises. Even today, with the Amiga owned by such a large and powerful company as Gateway 2000, no one can be completely sure as to what will happen next.

The only way the Amiga is going to make it back as a mass-market machine is with a lot of commitment and financial backing. So far, for all the good intentions and comforting words we have yet to see any positive moves by Gateway 2000 in regard to Amiga International.

I was saving only two months ago that we should be patient and not expect anything incredible in the near future, but where are the hardware and software engineers? I think Amiga International may find it difficult to write a new operating system with just the tea lady.

Once upon a time the Amiga industry was populated by visionaries, individuals with great ideas and incredible expertise. Over the last few years, due to a variety of factors such as declining software sales, the rise of the PC and most importantly the almost complete lack of continuity and strategy in Amiga hardware sales and development, these visionaries have for the most part left the scene. If this is the end of the road for the Amiga, it is a sad fate to befall such a once-magnificent machine; but it



nss the end..

After over nine years in publication, Amiga Computing bows out

seems hard to imagine the situation improving in the immediate future unless Gateway 2000 can pull something truly exceptional out of its wellresourced hat.

I would like to thank all our readers for their loyal support over the years. Even though Amiga Computing may not have been the best selling magazine, it has managed to cover a broad range of subjects and has brought you interviews with the likes of Aardman Animations and the creators of Babylon 5, not to mention indepth reviews and features.

I would like to thank everyone I have worked with on the magazine, I've had a lot of fun and learned a lot from you all. For the last few weeks there has been a steady flow of email from people saying how much they will miss Amiga Computing, and it is good to know that, in some small way, we've been able to touch so many people's lives. My arse we have.

Neil Moh Editor

ART EDITOR Graham Parry

PRODUCTION EDITOR Justine Bowden

NEWS EDITOR Hugh Poynton

REGULAR CONTRIBUTORS Dave Cusick

Paul Overaa

ADVERTISING MANAGER Elaine Prescott

AD SALES Sue Horsefield

AD PRODUCTION Barbara Newall ADTYPESETTERS Malcolm Thorley

Eddie Burke

MARKETING MANAGER Steve Tagger

PRODUCTION MANAGER Alan Capper

ADMIN MANAGER Joanne Clifford

CIRCULATION DIRECTOR David Wren

MANAGING DIRECTOR Ian Bloomfield

DISTRIBUTION COMAG (01895) 444055

SUBSCRIPTION 0151-357 2961

"you're a slave to money, and then you die."

Published by IDG Media, Media House, Adlington Park, Macclesfield SK10 4NP

> Tel: 01625 878888, Fax: 01625 879966 EMail contacts:

> Editorial: edit@acomp.demon.co.uk Advertising: ads@acomp.demon.co.uk http://www.idg.co.uk/amigacomp/

We regret Amiga Computing cannot offer technical help on a personal basis either by phone or in writing. All reader enquries should be submitted to the address in this panel. Amiga Computing is an independent publication and Amiga Technologies is not responsible for any of the articles in this issue or for any of the opinions expressed.

©1997 IDG Media . No material may be reproduced in whole or in part without written permission. While every care is taken, the publishers cannot be held legally reponsible for any errors in articles, listings or advertisements.

All prices listed in the editorial content of this magazine are inclusive of VAT unless stated

12 issue subscription £49.99 (UK), £69.99 (EEC) £84.99 (World)

Ongoing quarterly direct debit: £10.99 (UK only) Printed by Spottiswoode, Colchester, Essex



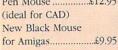
US Readers - Amiga Computing (ISSN 0959-9630) is published monthly by IDG Media, England, a subsidiary of the IDG Corp. Periodical postage paid pending at Boston, MA and additional mailing offices. Send enquiries to: IDG Macclesfield.

US yearly subscription rate: USA Gold \$70, USA Standard \$40

For nine years Amiga Computing has been the leading magazine for Amiga enthusi-asts. Amiga Computing promises to inform, educate and entertain its readers each month with the most dedicated coverage of the Amiga available

Amiga Mice MegaMouse Plus (3 Button)£10.95 Optical Mice£29.95

New Golden Image TrackBall£19.95 Pen Mouse£12.95





(Ram Boards)

RAM CARDS A1200

A1200 with clock and 4Mb (not upgrade	able)£49.00
A1200 with clock and 8Mb	£65.00
A1200 with clock, 8Mb & 33Mhz FPU	80.00
33Mhz FPU inc. crystal	£15.00

Controllers

Catweasel for A1200 - allows you to	
connect High Density Disk Drives	£55.00
Catweasel for A1500/2000/4000	£55.00
Buddha IDE Controller for A1500/2000/4000.a	£55.00
Catweasel plus Buddha for A1500/2000/4000.a	£79.00
Oktagon 2008 SCSI controller	
Multiface III	£79.00
PCMCIA Controller for CDRom for A1200	£69.00

New GI-Quatro Buffered Interface for A1200

(Successfully launched at World of Amiga Show	(97)
Buffered Interface for A1200 with	
IDEfix'97 software allows to connect	
4 ATAPI devices to A1200£	59.95

New AlfaQuatro Interface

Specially made hardware and software. Allows 4 ATAPI devices, ie, 2 IDE hard disk & 2 IDE CD Rom to Amiga 4000 internal IDE controller, through Alfapower on Amiga 500/500+, comes with full IDE Fix software£59.00

Joysticks & Joypads

Amiga Joysticks	£9.95
Amiga Joypads	£9.95
CD 32 Joypad	£14.00

Speakers

Multi Media Spea	kers:
100 watt (pmpo)	£30.00
240 watt (pmpo)	£45.00



Winner of Gold Format Award in Amiga Format February 1997

Best pricing on CD ROM Drives & Hard Drives

We can supply CD ROM solutions for ALL Amigas from A500 to A4000. We will match any genuine advertised price and also give four top titles free Nick Faldo's Championship Golf; Syndicate; Pinball Fantasies & The Chaos Engine on top where we have to price match any product.

All our External IDE CD ROM Drives have built in power supplies (they do not draw power from your Amiga) Three different options to connect CD ROM drives to A600 or A1200

- a) Use PCMCIA port for total external solution without opening up
- your Amiga. You can Hot plug this device without harming your Amiga. b) Use Internal IDE port with AlfaDuo if you have 2.5" Hard Drive
- (will be with full IDEFIX software). c) Use Internal IDE port with GI-Quatro buffered interface if you have 3.5" Hard Drive (will be with full IDEFIX software).

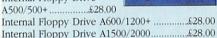
All CD ROM drives have play CD facility.

	External	Internal	External*	Internal
	A600/A1200	A1500/A2000	A500/A500+	A4000
Quad speed CD ROM for	£149.00	£119.00	£129.00	£109.00
Six speed CD ROM for	£159.00	£129.00	£139.00	£119.00
Eight speed CD ROM for	£169.00	£139.00	£149.00	£129.00
12 speed CD ROM for	£179.00	£149.00	N/A	£139.00
16 speed CD ROM for	£189.00	£159.00	N/A	£149.00

*(for A500/A500+ Alfapower hard drive controller and Hard Drive is required). A1500/A2000 supplied with IDE controller & software. A4000 supplied with AlfaQuatro interface & Full IDEFIX software.

Floppy Drives

External Floppy Drive
for all Amigas£39.95
Internal Floppy Drive
A500/500+ £28.00



IDE Hard Drives

HARD DRIVES + BUDDHA CONTROLLER	
FOR A1500/A3000/A4000	Ring

IDE 2.5" Hard Drives

IDE 2.5" Ha	rd drives com	e formatted a	and installed
with Workb	ench. Cable,	screws, softw	are and
instructions	supplied. (pl	ease ring for	availability)
80Mb	£69.00	340Mb	£109.00
120Mb	\$79.00	420Mb	£119.00

80Mb£69.00	340Mb£109.00
120Mb£79.00	420Mb£119.00
170Mb£79.00	540Mb£129.00
250Mb£89.00	

IDE 3.5" Hard Drives

IDE 3.5" Hard drives come formatted and installed with Workbench. Cable, screws, software and instructions supplied. (please ring for availability) £130 00

1.00ig		J.201g
1.2Gig	£135.00 *	3.8Gig£235.00
1.7Gig	£155.00	5 Gig Maxtor £329.95
2.1Gig	£175.00	"Amiga Format Gold
2.5Gig	£179.00	Award August '97"

4Mb Simms£20.00	16Mb Simms£60.00
8Mb Simms +30 00	32Mh Simms £140.00

Miscellaneous Products

And the street and the street of the street	
44pin 3 connector cable	.£5.00
44pin 2 connector cable	.£3.00
40pin 3 connector cable 90cm	.£5.00
AlfaDuo 44pin to 40 pin Interface & IDE cables.	£20.00
AlfaQuatro 3x40pin interface & IDE cables	£39.95
DD floppy disks (50) (including multicoloured disk labels)	
	£13.00
DD floppy disks (100)	c25 00
(including multicoloured disk labels)	\$23.00
3.5" Hard Drive Kit for A600/1200 + install software	£15.00
Diskbox to hold 10 discs	
Animal Jungle design and Dinosaur design	
Optical Mouse Mat	
2 in 1 Scanner/Mouse Pad	
Can be used as a memo pad	£3.00
Amiga Power Supply 4.5 amp	£15.00
Plain Wristrest	
CD Cleaners - half price	
CD Rom Cleaner	£3.00
Automatic CD Rom Cleaner (battery powered).	
Laser Lens Cleaner	

Accelerator Boards

1230 33Mhz + 4Mb	£135.00
1230 33Mhz + 8Mb	£145.00
1230 33Mhz + 16Mb	£175.00
Viper MKIV 42Mhz 4Mb (not upgradeable).	£80.00

Viper MKV

1230 50Mhz +	4Mb	£159.00
1230 50Mhz +	8Mb	£169.00
1230 50Mhz +	16Mb	£199.00

Accelerator for A600

Viper A630	40Mhz	4Mb	(not	upgradeable)	£110.00
Viner A630	40Mbz	QMB	Cont	ummerdooble)	\$120.00

All prices include VAT. Please add £3.50 P&P for items under £30.00, £5.00 for items over £30.00,

£8.00 P&P for Scanners, Speakers & Hard Drives, £10.00 courier for next day. Tax Free Export Orders Welcome. Golden Image accepts Access, Visa, Cheques & Postal Orders. E&OE. Prices subject to change without notice. Goods subject to availability. Specifications subject to change without notice.



Unit 65, Hallmark Trading Estate, Fourth Way, Wembley, Middx HA9 0LB Sales Hotline No: 0181 900 9291 Fax: 0181 900 9281





MasterCare





AMIGA NETWO SOLUTION Connexion offers a fast In autoboots via Netzwerk, the in the need to install additional

olden Image UK Ltd has announced the release of ConneXion, a new Ethernet adapter that allows any Amiga 1500, 2000, 3000 or 4000 to be connected up to a standard Ethernet network.

ConneXion offers a fast 10 Mbit Ethernet link and autoboots via Netzwerk, the in-built boot Rom, avoiding the need to install additional drivers. The card employs a 32K – 16 bit on board cache so as to boost performance and avoid any loss of processing speed, as often happens over Ethernet connections.

The ConneXion adapter retails at £175.00 and is available directly from Golden Image. For more details phone: – 0181 900 9291



MAKE CD 2.4 RELEASE

German Software developers Angela Schmidt and Patrick Ohly have announced the release of their latest software package. Make CD 2.4 is the first CD writer software with CD-RW support and the software can now completely erase and rewrite CD-RW media. CDs can be erased up to 1000 times without any deterioration in quality.

Make CD 2.4 offers a host of extra features to v2.3 including improved drivers and bug fixes. The latest ver-

sion of the software also offers Swedish, Norwegian, Hungarian and Italian user interface. The English manual has apparently been improved but is not yet completely finished. A slightly limited but freely distributable version of Make CD is available on the Internet on the MakeCD home page at http://makecd.core.de/

Make CD is available at HiSoft and its dealers, and directly from the authors. For direct orders contact: Angela.Schmidt@stud.uni-karlsruhe.de

CYGNUSED SOON TO BE RE-LEASED

Schatztruhe, the German based Amiga software company, is to re-release the popular Amiga text editor, CygnusED. Schatztruhe has collaborated with the test editor's original author's, Bruce Dawson and Olaf Barthel to update the program and fix long standing bugs. Schatzetruhe and

CygnusED's authors have decided to poll Amiga owners on the development of the project. The text editor should be released by the end of this year.

If you're interested in influencing the development of the editor send your suggestions to: schatztruhe@cww.de

VULCAN TAKES AMERICA

Vulcan Software, the Amiga games publisher, has expanded its operations to include the US and Canada and officially launched its American branch.

Vulcan Software America will offer mail order, services and technical support specifically for its American customers. It will also assume the role as main distributor of Vulcan products to dealers in America and Canada. Dealers who want to stock Vulcan products should now contact Vulcan Software America for more information.

COMPUTER CITY TO DISTRIBUTE IN BELELUX

Amiga International Inc. and the Rotterdam based computer retailers, Computer City have agreed on a deal which will enable the Dutch firm to market the Amiga in the Benelux countries. The deal, which was formalised on 15 July will allow Computer City to sell new Amigas and peripherals and software support for existing models.

"This activity will help us to reinvigorate the Amiga market place in the Benelux. Our basic of success is to work together with partners to build up the former market places and to find new ones and to be ready for new product distribution", said

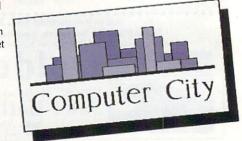
to build up the former market places and to find new ones and to be ready for new product distribution", said Petro Tyschtschenko, managing director of Amiga International, Inc.

Computer City was founded in 1988 and has since then been dedicated to catering for the Amiga market in the Benelux counties. According to the company, it believes that there has been, and still is, a substantial market for the machine in Benelux and the rest of the world.

For more information contact:

Ron van Herk Computer City

Fax: +31-10-4517748 E-mail: info@compcity.nl Web: http://www.compcity.nl/



WEB HACKER STALLS THE INTERNET

Hacker, Eugene Kashpureff, plunged the Internet into chaos last month with the most spectacular hack since the 1988 Internet Worm paralysed the Net.

Kashpureff claims to have exploited a loophole in the Domain Name Service software normally used to look up addresses of Internet sites which allowed him to add his servers to the official list of Internet domains and 'top-level' servers.

The hacker's actions were apparently a protest against InterNIC's monopoly on top-level domain names and prevented Internet users all over the world from connecting to their desired sites.

Cerbernet was one of the few ISPs to escape the chaos. According to

Cerbernet's Technical Director, Justine Kerry "The Internet still depends on a level of trust and community. The InterNIC's monopoly on domain naming runs contrary to this spirit, and yet depends on co-operation by all ISPs in that we must all choose to use the official root name servers. Most ISPs don't even realise they are effectively bolstering the InterNIC monopoly. Sadly the whole Internet has suffered the consequences of unilateral action taken by AlterNIC to smash this monopoly by overriding our name server choices".

For more information take a look at http://www.alternic.net/protest.html

AMIGA LICENCE CLAIM

Gateway 2000, the Fortune 500 company that now owns the rights to Amiga International, disputed Rightiming Electronics' bid to sell and develop the Amiga in the far East this month.

On 23 July Lotus Pacific, a public company listed on NASDAQ Bulletin Board, announced it had signed a co-operation agreement with China's largest TV producers, the Sichuan Changhong Electronics Group Corporation of China, to produce 200, 000 units of the Wonder TV A6000.

Rightiming Electronics, a direct subsidiary of Lotus Pacific, purports to hold a licence to use Amiga patents, trademarks and copyrights in China, Taiwan and the parts of the former Soviet Union. The deal with Sichuan Changhong includes supplying the company with product specific chip sets and other key components.

Gateway 2000 responded the next day by issuing a press release to the effect that it disputed any claims by Rightiming Electronics about owning a licence to produce Amiga technology.

"We dispute its license, its right to sell any license and we dispute any claims it has made with respect to Amiga patents, copyrights, or trademarks. Gateway 2000 owns all Amiga patents, copyrights and trademarks world-wide and will continue to license Amiga technology to qualified companies", said Gateway's press release.



NEW MEDIASOFT TITLES

MediaSoft, the UK publisher of Amiga Review, has announced that it is to split the magazine into two individual parts to fully cover the various aspects of the Amiga. Amiga Review will be focused largely on hardware and 'serious' applications, with Amiga Gamer being geared towards the Amiga games market.

the Amiga games market.

Amiga Review will be halved to £1.60, while Gamer will be sold for £1.50. People who took out a subscription to Amiga Review will receive both magazines for no extra charge. Both magazines will be only available through mail order.

The split has come about because of the resurgence of interest in the Amiga computer platform and the increased number of games that are being developed and produced. Readers can send orders by sending cheques or postal orders to MediaSoft Magazines, Communications House, Isle of Wight, PO37 7LU.

For more information take a look at Amiga Review's Web site at: http://www.mediasft.demon.co.uk/ARMagazine/arindex.html

CPUG SUMMER OFFER

The endependent Computer Products User Grouphas announced that it is to cut its six month subscription



rate to £13 (including one share) for UK members and £15.50 for Eire and Europe. Overseas airmail rate for the offer will be £18.

ICPUG was formed back in 1978 to provide help and advise for owners of Amigas, PCs and other home computers. ICPUG is regarded as being about the only remaining source of information for 8 bit computers.

The membership offer includes all the ICPUG journals for 1997, a free PD software library for the Amiga and all other Commodore machines and a PD library for the PC (Windows and DOS).

For more details phone John Bickerstaff on 0181 651 5436, or take a look at the ICPUG Web site at: www.icpug.org.uk

A MIGA APACHE

The new version of the Amiga Apache Web server software has been released. Amiga Apache 1.2.1 httpdaemon is downloadable from the Apache Web site http://www.dsdelft.nl/~apache . It's fully compatible with the original Apache Web server which can be found at: http://www.apache.org.

The Amiga Apache project is completely staffed by volunteers and Amiga enthusiasts under the leadership of Bert Vortman.

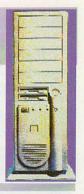
PHROMA ANNOUNCES NEW DIY A1200 TOWER CASE

Chroma, the specialist Amiga hardware supplier, has announced the launch of the A1200 DIY tower case. The Chroma DIY tower is, so Chroma boast, the cheapest tower case available in the UK.

It will take an A1200 motherboard complete with internal PSU or 'powerbrick' for motherboard power. The PCMCIA slot is still accessible for use with a Squirrel or similar device. The tower will also allow the user to install a complete PC system or Zorro slot array.

The Chroma tower has 10 drive bays and comes complete with 230 watt PSU, UK mains plug, screws/spacers/cable ties/2-part stand/guide. To complete a tower system, a keyboard+adapter and floppy drives+adapter are required along with any IDE or SCSI peripherals/interfaces.

The tower is available, either fully converted (£105.99), or in its cheaper DIY format (£79.99). For more information contact Chroma at: chromanet@aol.com or on: 01328 862693



EXTRACTING COVER DISK

Before putting the cover disks anywhere near your computer, write protect them by moving the black tab in the top corner of the disk, so you can see through the hole. Doing this makes sure you cannot damage your disks in any way. There is also no reason why the cover disks need to be written to, so even if the computer asks you to write enable the disks, don't do it.

To extract any single archive, simply double click its icon, and follow the on screen instructions. If you want to extract the program to Ram, select the NOVICE level on the welcome screen, and press proceed once on the current screen, and then again on the next. The program can then be found in your Ram disk. Normally most programs need further installing, so read the documents on how to do this.

HARD DRIVE USERS

Hard drive users do not have to boot with the first disk, but you must make sure you have the Amiga's Installer program in your C drawer. To make sure your hard drive has the correct files in place double click on the SetupHD icon. This will check if you have the Installer program and if not will copy it across. Do not worry as it will not write over any existing files.

All you hard drive owners will find MultiExtract very useful. It is a separate method of extracting the cover disk files. It allows you to extract a number of files in one go, to your hard disk or Ram.

When you run MultiExtract, you will be presented with a number of check boxes, each representing one of the programs on that cover disk. Just de-select all the programs you do not want extracting, and then press proceed. All the selected programs can now miraculously be found in the selected destination.

FAULTY DISKS

If you should find your Amiga Computing CoverDisk damaged or faulty, please return it to:

TIB Plc, TIB House, 11 Edward Street, Bradford, W. Yorks BD4 7BH.

Please allow 28 days for delivery



Another great selection of Amiga utilities to make life easier

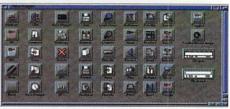
MAGNUM OPUS 2

Author: Richard Lane Requires Directory Opus v5.5

Why can't life be more simple? Why can't there be just one picture format, one sound file type and one document style? But no, every man and his dog has come up with their own stupid format, and where does this leave you the user? I'll tell you where — confused and bemused.

Help is at hand however, for Opus 5 users at least, in the form of Magnum Opus version 2. This add-on for Opus 5 will save you hours of frustration trying to set up and configure Opus 5 to use all those different file types. To back up the predefined file types there are a whole host of icons for use in Directory Opus and there are configuration files prewritten to take advantage of both the new filetypes and new icons.

You have two routes to installing Magnus Opus. You can either use the supplied installer that uses the normal Amiga installer, all very lovely or, for more experienced users, you can try



Well Magnum Opus may not win any artistic awards, but as it save you hours of work you can't complain

doing the installation by hand. If you already have an earlier version of Magnus Opus installed this will of course replace many of those files so don't worry.

To start you should rename the original filetype directory in the Opus drawer to filetypes_original and then copy the new filetype drawer from the Magnum Opus directory. Next copy over the new images drawer and also the contents of the other drawers to there respective Opus directories. When you restart Directory Opus it will take a little longer than normal but this is perfectly normal.

BIG RED ADVENTURE SOLUTION

Author: John Barnsley Requires Big Red Adventure

Well, we started so we'll finish. If you have been looking forward to completing the Big Red Adventure with the help of our solution and are panicking now it has stopped, with this being the last issue and all, don't worry yourselves. Here is the complete solution for this rather nifty point and click adventure. As you will see the whole thing is rather long as so even with the solution will take you ages to finish, enjoy.



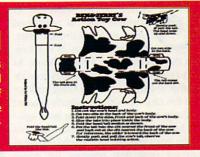
If anyone says I look like him they get punched, alright?

AMIGA COMPUTING OCTOBER 1997

ACTION COW

Author:Ben and Jerry® Requires Scissors and Printer

There is a story behind this. When it was announced that Gateway had bought Amiga Technologies I was searching around the Internet for a nice picture of a cow, but the Internet being what it is I couldn't find sack all. I then came across Ben and Jerry's action cow and a bit of joy entered my life. Just load the gif into your favourite paint package and print it off. With the supervision of a suitable adult, cut out the cow, sniff some glue, tape the beast together and lo and behold, you will have your very own Gateway/Amiga/Ben and Jerry Action cow type thing, groovy.



WSPEED

Author: JANI Soft Requires Workbench 2.04

If you got last month's great issue, and it was great, you may have read little Dan Winfield's (and he is little) comparison of the Picasso IV and CyberVision 3D boards.

In the review Mr Winfield used a program called WSpeed to do some straight forward speed comparisons, and for your pleasure here is the very same program so you can try it out and see how much slower your AGA and ECS systems are in comparison.

WSpeed - as recommended by Mr Winfield



WAITGUI

Author: Dirk Tiee Requires Workbench 2.04

If you ever need to delay people on a computer it is a good idea to let them know why they are sitting around doing nothing, and how long they are going to be exercising their posterior. This tiny program replaces the original Amiga Wait command with one that pops up a small windows that has a progress bar along with a count down. It is all very easy to use and looks a lot better.



MOUNT DOS

This tiny little program that adds a handy function to Workbench and your Amiga operating system. What is this amazing function I hear you cry. It simply recognises and mounts PC hard drives connected to your Amiga. These drives can either be IDE or SCSI drives, and it may actually recognise any type of media including Jazz and Zip drives, but I cannot guarantee that as I have never tried it.

Before you can use MountDOS you need to change a few of its tool types so click on its icon and select the icon information. You will need to change the device and unit numbers so MountDOS knows what drive it should be looking for. You will also need to take the mount command out of the brackets so it will actually mount the drive.

VISUAL PREFS

Author: Massimo Tantignone Requires Workbench 3.0

One thing that has been made accountable for putting people off the Amiga is the interface. With the flash and shiny interface of System 8 and Windows 95, the old Amiga Workbench is looking rather shabby and dull. But this does not have to be case, over the last year or so, programs like Sysihack and MCP have shown that there is no reason why the interface cannot be updated quite simply, and so look a lot better.

Visual Prefs takes the whole thing to the extreme allowing you to alter almost every part of Workbench. The result is a much better looking interface, as you can see from the grab. The program is also simplicity to use. A preference program lets you configure the interface and to actually get these changes in place put the line run >nil: visualprefs in your startup sequence just before the IPrefs command is run.



Now doesn't that look much better than before?

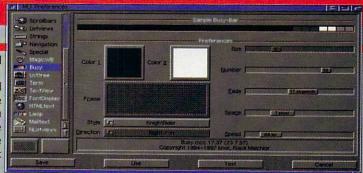
MUI ENXTENSIONS

Author: Gilles Masson/Klaus Melchior ● Magic User Interface

One thing that makes MUI so good is it modular design that allows separate parts to be added or just updated at a later date. On the disk are two new part for MUI one is an update to the busy single that many programs use, while the other is a replacement for the list view that is much

more advanced than the original one.

Just used the supplied install scripts and everything will be copied across as for you, you should also restart you machine before trying them, to make sure that the libraries are not resident in memory.



uildhall is best know for its extensive range of re-released Amiga games. With mini Office, however, it makes its first foray into the serious side of Amiga software. As with its games efforts, Guildhall has gone for another re-release of an old Amiga package – in this case mini Office, originally released by Europress Software some five years ago.

I have to admit than when I first got hold of the box I was not too hopeful. Guildhall can get away with releasing old Amiga games as for the last few years there has been very little progression or development in that area (take F15-II that is nine years old but it still plays well). When it comes to utilities, however, it's whole different ball game.

The "serious" software side of the Amiga has been far from stagnant the last few years. Haarge and Partner came to the forefront of development and long running Amiga programs such as Wordworth, FinalWriter, Turbocalc – to name but a few – continue to be developed.

Mini Office comes on four disks; one contains the front-end and file manager program while the other three have the database, spreadsheet, wordprocessor, spell checker and graphic programs. As the programs are written in AMOS and were made five years ago, they are designed for 1Mb floppy based Amigas and, as a result, there is no HD installer. The programs can be run from the hard drive, you just have to copy the contents of the files into a directory and assign each disk name to this directory.

The wordprocessor is somewhat of an early '80s throwback. Even the basic ED program could give it a run for its money. We are talking minimalist programming here – you can type text, make it bold, italic or underline it, add left, right and centre justification, adjust tab positions and that really is about it, apart from the spell checker.

Onto the spreadsheet. Again, this a basic program with the minimum of editing tools available. You can cut and paste individual or blocks of cells and, while using formulae, you can still select cells and a range of cells, making creating formulae easy. The number of

Guildhall dusts off another ancient
Amiga program, but perhaps this one should have stayed in the crypt

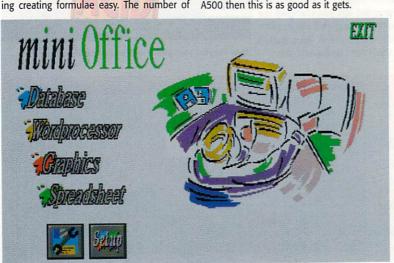
formulae covered is fairly extensive, including logarithmic and logical expressions.

The database module is a minimalist flat database. You can set up a template form and a few records, search those records and print them off. If you need to catalogue anything, such as your CD collection, you have far to much time on your hands, but it is possible with this database.

This leaves the graphics module; not so much a paint package of any description, but really an extension to the spreadsheet and database modules. Quite simply this will let you import a group of statistics or enter them manually and produce a chart of your choice. Again, there are no real surprises here: Bar, pie and line charts are available along with stacked, area and 3-D versions. Up to four separate data sets can be used in the same graph at any one time.

At the end of the day, for 20 quid, you are getting a five year old AMOS program so you can't expect too much. The weakest part is the wordprocessor module which is very poor, the spreadsheet and database modules are passable and the disk manager and graphic programs are helpful additions.

The real decision you have to make is whether you would be better off spending another 25 pounds and getting the Wordworth Office CD, but then if you only have an A500 then this is as good as it gets.



Office Office



Bottom line

REQUIREMENTS

RED essential BLACK recommended



RAM

PRODUCT DETAILS

Product	Mini Office		
Supplier	Guildhall £19.95		
Price			
Tel	0891 227 355		

SCORES

Guildhall@glsukok.demon.co.uk

SCORES	
Ease of use	90%
Implementation	50%
Value For Money	75%
Overall	65%

1 MILLION POUND STOCK CLEARANCE!

INBOARD

INTEL CHIPSET VX/512 £52.00 **INTEL CHIPSET HX/512** £60.00 **INTEL CHIPSET TX/512**

Exc Vat Inc Vat £61.10 £70.50 £69.00 £81.08

SOUND CA

	Exc Vat	Inc Vat
16 BIT	£13.00	£15.28
32 WAVE	£39.00	£45.83
SOUND BLASTER 16	£39.00	£45.83

FAX/MODEMS

DIAMOND 33.6 VOICE	£40.00	£47.00
EXTERNAL 33.6	£60.00	£70.50
US/ROBOTICS 33.6	£75.00	£88.13
US/ROBOTICS 33.6 ext	£120.00	£141.00

GRAPHICS CARDS

1 MB DIAMOND	£19.00	£22.33
2 MB DIAMOND	£27.00	£31.73
1 MB GENERIC	£13.00	£15.28
2 MB GENERIC	£23.00	£27.03

MONITORS

DAEWOO 14"	£99.00	£116.33
DAEWOO 15"	£159.00	£186.83
DAEWOO 17"	£280.00	£329.00

ALL DAEWOO MONITORS CARRY A 3-YEAR ON-SITE WARRANTY

HARD DRIVES EIDE

1.2 GIG	£105.00	£123.38
2.1 GIG	£117.00	£137.48
2.5 GIG	£145.00	£170.38
3.2 GIG	£165.00	£193.88
3.8 GIG	£180.00	£211.50
5.1 GIG	£245.00	£287.88

MEMORY

4 MB SIMMS	£10.00	£11.75
8 MB SIMMS	£21.00	£24.68
16 MB SIMMS	£45.00	£52.88
32 MB SIMMS	£99.00	£116.33
1 MB 30 PIN	£5.00	£5.88
4 MB 30 PIN	£17.50	£20.56
16 MB DIMMS	£45.00	£52.88
32 MB DIMMS	£99.00	£116.33
64 MR DIMMS	£199.00	£233 53

PROCESSORS

INTEL P133	£82.00	£96.35
INTEL P166	£125.00	£146.88
INTEL P200	£189.00	£222.08
MMX P166	£179.00	£210.33
MMX P200+	£299.00	£351.33
CYRIX P166+	£55.00	£64.63
CYRIX P200+	£75.00	£88.13

CASES

MINI TOWER 200W/PSU	£18.00	£21.15
MIDI TOWER 200W/PSU	£25.00	£29.38
FULL TOWER 200W/PSU	£48.00	£56.40
ALL CASES ADE CE	ADDDOV	ED

ALL CASES ARE CE APPROVED

CD ROM DRIVE

6 SPEED	£32.00	£37.60
8 SPEED	£32.00	£37.60
16 SPEED	£52.00	£61.10
AUDIO CABLES	0.55p	0.65p

MISC

FLOPPY DRIVES £11 00 £12.93

KEYBOARDS & MICE

105 KEYBOARD	£6.00	£7.05
MOUSE	£2.25	£2.64

WE HAVE A PRICE

DELIVERY CHARGES

SMALL CONSUMABLES AND SOFTWARE ITEMS UNDER THE VALUE OF £59 PLEASE ADD £3.50 P&P. OTHER ITEMS EXCEPT LASERS, NEXT DAY COURIER SERVICE £10 PER BOX. OFFSHORE AND HIGHLANDS, PLEASE CALL FOR A QUOTATION. IN ADDITION WE OFFER THE FOLLOWING EXPRESS SERVICES: SATURDAY DELIVERY NORMAL RATE PLUS £15 PER BOX. MORNING, NEXT DAY NORMAL RATE PLUS £10 PER BOX. E&OE PRICES ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE. ALL TRADEMARKS ACKNOWLEDGED. TRADERS TERMS & CONDITIONS AVAILABLE UPON REQUEST.

2% CREDIT CARD SURCHARGE APPLIES

TRADE AND EDUCATIONAL ENQUIRIES WELCOME

PERSONAL CALLERS WELCOME

Tale of three browsers

miga Web development seemed to jump out of nowhere. I remember, just over two years ago, being thrilled that AMosaic could display both text and images and in version two, forms were supported. Looking back, Amiga browsers have come on as much as the HTML they display.

At that time Web sites where boring, the first version of HTML was still the only version widely used, and this lead to simply designed single column pages interspersed with graphics. So what happened? Well, Netscape 2 appeared and introduced new table tags and frames, along with progressive decoding, transparent GIFs and a bunch of new tags for site designers.

Bang, suddenly every magazine was talking about the on-line experience – cyber this, cyber that and cyber the other, and we are still going strong. Can you blame us, before the advent of fast modems and low cost ISPs we were stuck with using BBSs. I'm not knocking BBSs, I have used them in the past and they offered a good, if limited, service. The Internet provides everything the BBS can, but a million times more and on a world-wide scale.

Suddenly the Web became the glitz and



Just for comparison, here is Internet Explorer 3 on the Mac. Every part of this page is correct, even down to the text area being correctly shown as a single text line, and not the three or four that all the Amiga programs display New versions of AWeb, iBrowse and Voyager. I'd say that calls for a head to head feature

bright lights and everyone was interested in it. AMosaic was dumped and from those ashes rose iBrowse – a very competent Web browser with table support, internal image decoding and complete forms support. And the Amiga Computing team looked upon iBrowse and saw that it was good and made their own table based Web site, and when Ben learned Photoshop properly we got the white buttons and not the dodgy orange ones.

So here we are today, table, frames, internal image decoding and Javascript and Java are just around the corner and I thought it was about time to see how the three remaining Amiga Web browsers shape up.

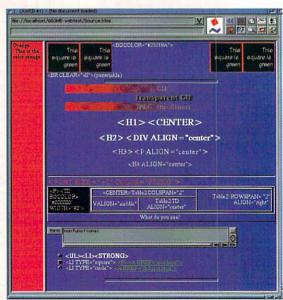
Testing Web browsers is not the most straight forward task. Looking at features all three have pretty much the same features. Things like bookmarks, cache browsers, definable buttons, quick links, grey scale output, printing, URL history are found in all three.

AWeb is the obvious program when it comes to missing features, such as no internal mail or image decoding. It cannot even handle animated GIFs as it is restricted to using Datatypes. It is however very stable, in fact AWeb has never crashed while in use. Something you can expect iBrowse and Voyager to do once or twice a day.

When it comes to layout quality, I would say AWeb does the best job, but its palette selection and dependence on Datatypes ruins any chance it has when it comes to graphics quality. Generally I have found that Voyager and iBrowse give the same sort of performance both graphically and techni-

cally.

Which one wins then? I could sit on the fence and say, "At the end of the day the real winners are you and the Amiga," but that would be copping out. So, taking a look at each in turn – AWeb technically provides by far the best page layout and understands more tags than the others, but it is greatly let down by its very poor image handling and clunky interface.



Widely accepted as the trailing program in the browser wars. As you can see, AWeb displays almost every part of the page perfectly. The big exception is the image scaling part – the top two corner images should be a quarter of the size, and also the top GIF image is an animation GIF that AWeb cannot support due to its dependence on Datatypes

AMIGA COMPUTING OCTOBER 1997



The main thing that hits you is that iBrowse decided not to display the text area form. Apparently if there is no name attribute, iBrowse just ignores the form. Also you can see that iBrowse does not seem to support the list shapes even though it does have alternatives, but otherwise everything is hunky dory

iBrowse was once way ahead of the rest on all fronts, and I still think the layout and design of the front end are the best. It has its own progressive image decoder and can use Datatypes if need be, and it passed just about all the HTML tests.

Generally, Voyager is taken to be the

BDPPPSAH

Ta B B

superior browser and I would have agreed, but having carefully tested Voyager it does seem to make a poorer job of HTML handling than iBrowse or AWeb. On the plus side it has the best image decoder, though its dithering and palette selection could be better (not a problem for graphic card users), and uses less memory than the other

So, on efficiency and speed, Voyager wins. On design, iBrowse still leads and on technical merit it has to be AWeb, with iBrowse and Voyager an equal second.

TESTING TESTING

It is always difficult trying to comprehensively compare two programs, and with Web browsers the number of tags and possible combinations out there make it an almost endless task. So one possibility would be to look at a few general sites and see how the browsers handle them, but you could always end up missing some important tag.

For a more formal task I used a prewritten found page www.threetoads.com/Browser/main.html This takes the most regularly used and important tags and techniques on Web sites and puts them into one page.



A major evesore here is that Voyager has spat out the embedded table. I have to say though, that I have put tables in tables and Voyager has displayed those fine, so I'm not exactly sure why it doesn't like this one. The only other thing is Voyager ignores the size attribute for the horizontal rule

The page tests frames, tables, imbedded tables, lists, heading and fonts sizes, image formats and scaling, forms and various other formatting commands. Generally, if a browser can display everything on this page, it should have no trouble in the real world.

ves

yes

yes

yes

no

по

yes

yes

ves

по

yes

ves

yes

ves

ves

ves

EATURE COMPARISON

As you can see, feature for feature, there really is very little to tell these three browsers apart. The biggest omission is for AWeb – its dependence on Datatypes really does leave it trailing behind the others. Otherwise it would be keeping up with the "big two" quite well.

For the memory tests I ran the programs on a 64 colour 800x600 screen and loaded up the Amiga Computing main page. Using the avail command I measured the amount of memory before and after each program was run. So you should remember that MUI and ClassAct are also included in the values.

				The state of the s	THE RESERVE AND ADDRESS OF THE PARTY OF THE	A STATE OF THE PERSON NAMED IN COLUMN 2 IN	
URL completion is rather nice and is offered by iBrowse and Voyager. The simplest form works as for Netscape where you do not have to type the whole www.cnn.com only the cnn part and the browser fills in the rest. They also offer history based URL completion, so the browser tries			Middle align	no	yes	no	
			Forms	yes	yes	yes	
			URL completion	yes	yes	no	
to guess the URL yo	ou want as you type	it, but usually get	s it wrong.	Connections	32	32	256
The times at the end of the list shows how long it took the browser to reload the Amiga Computing homepage, with no memory cache and two			Mozilla spoofing	по	yes	no	
connections. As you	can see, iBrowse is	surprisingly slowe	r than the other	News	по	yes	yes
	turning the palette		d removing the	Mail	yes	yes	external
secondary dithering	does reduce this to	o 10 seconds.					
				Drag and Drop	yes	yes	по
				Bookmarks	yes	yes	yes
Browser	iBrowse	Voyager	AWeb	Printing	yes	yes	yes
Datatypes	yes	no	yes	Keyboard	yes	yes	yes
Prog. GIF	yes	yes	no	Arexx	yes	yes	yes
Prog. Jpeg	yes	yes	no	Cut/Paste	no	yes	no
Prog. PNG	no	yes	по				
Scaled images	yes	yes	no	Chip Mem	740Kb	630Kb	776Kb
Animated GIFs	yes	yes	по	Fast Mem	1.5Mb	1.2Mb	1.2Mb
H/VSpace	yes	no	yes	Total Mem	2.2Mb	1.8Mb	2.0Mb
Tables	yes	yes	yes	Javascript	planned	soon	?
BG colour	yes	yes	yes	Java	?	coming	?
BG gfx	yes	по	yes				
% Widths	по	yes	yes	Time	18 secs	7 secs	15 secs

Frames

Hidden

Lists

Moveable

New shapes

Ordered

HTTPs



COMPUTER CENTRE

LOW COST DELIVERY

€3.99 Next Week Day 65 C Saturday Delivery £14.99

Delivery subject to stock availability

SHOWROOM ADDRESS: Lombard

FIRST COMPUTER CENTRE,

DEPT. AC, UNIT 3, ARMLEY PARKCT,

STANNINGLEY RD, LEEDS, LS12 2AE. Lombard

VISA



ory. From the Al take th

AUTHORISED REPAIR CENTRE



We offer a FREE quotation on your Amiga or any peripheral (monitors, printers etc). A delivery tariff of just £5.00 is charged or alternatively you can visit our showroom. We can also arrange a courier pickup at an additional cost of £11.00.

OPEN I DAYS A WEEK

Mail: sales@firstcom.demon.co.ukFAX:0113 231-9191 BBS:0113 231-1422

ardwar

Amiga Magic Packs

Includes, Wordworth V4SE, Datastore, Organiser, Turbocalc 3.5, Personal Paint V6.4, Photogenics 1.2SE, Pinball Mania, Whizz & now also Directory Opus 4.12.

A 1 200 - 2Mb Ram - No HD £299.99 A I 200 - 6Mb Ram - 260Mb HD £429.99

1200 - 68030EC/40Mhz - 10Mb Ram - 260Mb HD -£549.99 200 - 68040/25Mhz - 18Mb Ram - 1.3Gb HD 1200 - 68040/40Mhz - 18Mb Ram - 1.3Gb HD £799.99

All HD Versions Include Scala MM300. All 68040 Ver. Inc. 250watt PSU

Part-Exchange

First Computer Centre will offer Part Exchange on your Computer Hardware & Peripherals, eg Monitors, Printers & Memory etc.....Call for pricing.

2nd User Bargains Available
Totally re-furbished Units with a

minimum 3 month warranty for sale, also all your Spares/Repairs catered for

2nd User

- Bargains Commodore 1084's £130 Printers from £30 Amiga's 500/+'s from £50 A1500's from £`150
- Amiga A1200's £180
 Multi-Sync monitor £180
 Inkjet's from £90

Accelarator card's £80

Memor

OWEST PRICES EVER A1200 4 Mb RAM £7

A1200 8 MbRAM £89 33Mhz Co Pro addf?

art exchange available on you old memory, Call for pricing.

Accelerator Cards

Blizzard I 230-50 £109.99 Blizzard 1260-50 £369.99 Blizzard SCSI Kit £69.99 Viper IV 42Mhz £89.99

Cyberstorm-50 £449.99 New!! 200Mhz Card....Call

CD ROM Drives/Squirrel I/face

Ultra CD ROM Drives Ultra 6 Speed IDE £149.9

Ultra Drive Kit £9



Squirrel scs1-11 Interface*£45.00 When bought with any SCSI devi £54.95 if bought separate

Surf Squirrel SCSI-II Interface *£79.99

*When bought with any r SCSI device £99.95 if bought

Octagon/GVPSCSICard £99.99 SCSI-II interface card for big box Amiga's A4000/2000

Internal SCSI CD ROM anyo CRD x 2 £24.99 £112.99 oshiba 5701×12 eac CDx16 £133.99

Pro-GRAB-

Pro-GRAB Only...£99.99 24 R/TPCMCIA adaptor £39.99

Hard Driv

3.5" Hard Disk Drives IDE SCSI

1.2Gig...£144.99 270Mb......£99 1.7Gig...£159.99 540Mb.....£149.99 2.1Gig...£169.99 1.8Gig.....£249.99 2.5Gig...<u>£207.99</u> 2.1Gig.. 3.2Gig...<u>£220.99</u> 4.3Gig..

Build Your Own SCSI Hard Drive

- SCSI case with built in PSU£49.9 • SCSI Hard Drive, Select
- SCSI Squirrel Interface£45.00
- 12 Month Warranty.

2.5" Hard Drives for A600/A1200 with Installation kit Seagate CONNER

80Mb....£64.99 130Mb....£80.99

170Mb...£85.99 250Mb..£119.99 420Mb.£129.99 540Mb..£139.99 810.£149.99 1.0Gig..£179.99 1.4Gig..£195.99 2.2Gig..£322.99

1701

Multi-Sync Monitors 14" 1438s£259.99



Amiga External drive£44.9 Power XL I.76Mb £69.9 A I 200/600 Internal drive £34.9 A500/500+Internal drive£34.9

Peripherals Mega Mouse+ 400 dpi (3 button) Amiga Mouse 560dpi (3 button) Quality Mousemat (4mm) Golden Image Am/ST Trackball ZyFi-2 Speakers (8 watts/channel) ZyFi Pro Speakers (16 watts/chann Roboshift (Auto mouse/J.stick switch£9
68882 Co Pro 25mhz PLCC
68882 Co Pro 33mhz PLCC
625

Zipstick Joystick Saitek Megagrip II PRIMA A500 5 I 2k RAM no clock PRIMA A500+ I Mb RAM RIMA A600 I Mb RAM no clock

Amiga Modulator Amiga Std. PSU **Heavy Duty PSU**

Printers/Flatbed Scanners

Canon BJ30

A3 version, with Photo Re Canon BJC620

PACKARD

HP400Colour ur, 600 dpiM £154.99 HP 670 Colour 300x300 dpi Colour Printi HP870 Colour 600x600 dpi up to 6 p/p/m HP5L Laser printi 4 p/p/m, 600 dpi, 1Mb of Ra HP6P Laser printi 8 p/p/m 600 dpi, 2Mb of Ra £350.99 £279.99 £585.99

£159.99 Stylus 400 Colour £189.99

30 page ASF built in. 720x720 dpi, 4ppm Black, 3 blour £185.99 Stylus 600 Colour Pertable colour printer, 10 page 45F,

Canon B]240C

L150.99 Stylus 800 Colour

Calcour Printer, 170 page 45F,

L40dpl, 4ppm Black, 4ppm Colour

Calcour Printer, 170 dpl.

Canon BJC 4200

L199.99 1440dpl, 8ppm Black, 7ppm Colour

Canon BJC 4200

L199.99 Epson GT-5000 scanner €399.99 £269.99 £369.99 Entry level A4 Colo ur Flatbed Sca

Epson GT-8500 £399.99 10 Cart. Option f 249.99 400dpi Fully featured A4 Colour Flatbed S Amiga Scanning S.ware £19720 dpi. £59.99 CITIZEN

5, 3,00dpi Col. Simple (as easy as ABC) to use 24 pin print Col. Simple (as easy as ABC) to use 24 pin print Comes as standard with 50 sheet Auto sheet for Tractor feed optional az (24.99) £119.99

> rom your printer, get a copy of Studio £49.99 or £44.99 when Turboprint 5 £49.99

ACCESSORIES Printer Switch Box 2 way Printer Switch Box 3 way

1.8 Metre printer cable 3 Metre printer cable 5 Metre printer cable 10 Metre printer cable Epson Iron-On Transfer Epson 720 dpi Paper Pack

anon T-Shirt Transfer £12.9 anon BC-06 Photo Cart. £24 anon BC-09 Fluorescent £24 anon BC-22 Photo Kit anon BC-29 Fluorescent (3)

anon Bubble Jet Paper HP DJ690 Photo Cartridge £29.5 HP Photography Paper HP Banner Paper HP Banner Paper
HP Deskjet Paper Pack 500£10.9
HP Premium Glossy Paper £9.9

PREMIER-INK

Ink Cartridge Refills
Single refills (22ml) 6.9
Twin refills (44ml) 612.9
Three colour kit (66ml) 619.9
Full colour kit (88ml) 627.9
Bulk refills (125ml) 624.9

Consumables

Ink Cartridges Canon BJ10/Star SJ48 Canon BJ200/230/240 Canon BJ30 (3 pack) Canon BJ30 (3 pack)
Canon BJC 70 mono (3 pack)
Canon BJC 70 colour (3 pack)
Canon BJC 4000 colour (single)
Canon BJC 4000 mono (single)
Canon BJC 4000 mono high cap.
Canon BJC 500 mono/col.
Citizen Printiva mono/col. Canon BJC 600 mono/col.
Citizen Printiva mono/col.
Citizen Printiva mono/col.
Citizen Priotiva Metallics
Citizen Priotiva Metallics
Citizen Projet Ilc mono/col.
HP. Deskjet 400 mono/col.
HP. Deskjet 400 mono/col.
HP. Deskjet 660 mono/col.
Epson Stylus 800 mono
Epson Stylus 800 mono
Epson Stylus mono/col.
Epson Stylus mono/col.
Epson Stylus 500 mono/col.
Epson Stylus 500 mono/col.
Epson Stylus 500 mono/col.
Epson Stylus 800 mono/col.
Epson Stylus 800 mono/col.
Epson Stylus 800 mono/col.
Star \$J 144 mono/colour (sing

o/colour (single) Paper

F.fold or S. sheet 500 sheets F.fold or S. sheet 1000 sheets F.fold or S. sheet 2000 sheets Quality Inkjet Paper (500)

Ribbons Citizen Swift/ABC mono Citizen Swift/ABC colour Star LC90 mono ribbon Star LC10/100 mono Star LC10/100 colou Star LC240c colour Star LC240 mono Star LC24-10/200/300 Colour Re-Ink Spray for mono ribbons

F.Writer Lte

Wordworth 6

W.orth Office

Final Writer 97

Pro MIDI I/face

MegaLoSound

Technosound Pro

Horror Sensa Into-the-Net

Into-the-Net
Insight Dinosaurs
Kara Collection
Learning Curve
Light ROM 4
Light ROM Gold
Magic Publisher

Magic Publisher Magic WB Enhancer

Aura 8/16 £2

Dir. Opus 5.5

Mini Office

Final Calc

Twist 2

Software

Bulk DSDD 30 x £9.99

£4.99

200 x £49.99 50×£14.99 500×£114.99 Branded DSDD 10 x £4.49 100 x £33.99 30×£11.99 200 x £64.99 50×£17.99 500 x £155.99

Disks

Bulk DSHD 100 x £29.99 10 x £3.99 30 × f 10.99 200 x £55.99 500 x £129.99 50×£16.99

Branded DSHD 100 x £35.9 30×£12.99 200 x £69.99 50x£18.99 500x£159.99

abels x 1000 £9.99

Modems

PRIMA V34+ Fax Modem

mazing Price/Performance
33.6 Baud Rate Class | Fax BABT & CE approved.

Only..£80.99
Complete with cables & Amiga BBS Software Surfware Internet Software Su with 30 Days Free Internet Tria Only £9.99, if bought with Mod

Software GP Fax

£44.99 Net&Web II £66.99 **iBrowse** £24.99 Net Connect v2 £49.99 £23.00 Voyager v3

Modem Accessories Phone Line Extension Cables 5mf6.99 10mf8.99 15mf10.9 Dual Socket Adaptor..£6

Miscellaneous

he Prima ATOM

Heavy Duty PSU

Colour Co-Ordinated Casing.
 4 x The Power of Std. Amiga PSU

•12 Month Warranty.

• High Quality 200 Watt PSU.

low Only

CD ROM Software Titles in S Call for li

(17.99 Octamed 6 & Sounds Terr. (17 Octamed Sound Studio
Oh Yes More Worms
PCX x86 Emulator

PCX x86 Emulator
Photogenics 2
Paranormal Encyclopedia
Prima Shareware I CD
Retro Gold CD
Sci-Fi Sensation 2
Space & Astronomy
System Rooster £8.99

System Booster The Spectrum CD 96 The Personal Suite Workbench Add-Ons Women Of The Web

AGA Experience 3 NFA £12.99 Golden Demos AGA Toolkit 97 £8.99 Horror Sensatio

niga Desktop Video 2 niga Developers CD niga Repair Kit niNet 14/15/16/17/18 AmiNet Set 1/2 AmiNet Set 3/4 Arcade Classics P

Assassins CD Vol. 3 C64 Sensations v2 Card Games CD Emulators Unlimited

Meeting Pearls v4 Miami & In To The Net Mods Anthology Multimedia Toolkit 1+2 oic Collection 3 Network 2 CD

Gnosts few years back when I was still the machine at university I came across some Postscript documents that I needed to read and, more use-

fully, print out. At the time I had no software that could handle Postscript files and I was not in a position to run off and buy any, so I took a quick look through Aminet.

I saw two possible programs, one used the Post library but I could never get it to work, while the other was a program distributed under the GNU licence and had the odd name of Ghostscript. But who cares what it is called when it can display and print Postscript files perfectly?

Postscript is a page description language thought up by Adobe. As Adobe wrote the industry standard page layout software, Quark Express, Postscript has itself become an Industry standard. It simply allows computers to define how a page, screen or picture should look, but in terms of straight lines, curves and shaded areas. OK, it is a little more complicated than that, but those are the basics.

Ghostscript is pretty straight forward to use. From the shell, supply the Postscript filename you want it to display. It will then, page by page, create each, well, page. For EPS images it just draws the image in colour if you tell it to use its own screen.

Neil Mohr takes a look at a free program that gives everyone easy access to Postscript documents

The one important thing you need to remember is to increase the amount of system stack available. To do this before you run Ghostscript you need to type stack 20000 into the Shell - this makes sure the program has enough workspace, otherwise it can crash. If at any time Ghostscript does crash, the stack being too small is more than likely the culprit.

As Ghostscript is designed to work with

many different computer systems it handles the output - whether it be to a printer, window or screen - in much the same way. All this has to be selected through the Amiga's Shell using the DEVICE switch.

So, for instance, if you want to tell Ghostscript that you want it to run on its own custom screen you have to use the DEVICEamiga_custom switch. When you run Ghostscript it will pop up a screen mode requester from which you can select a screen mode. So, depending on which processor version of Ghostscript you are using, you would type the following:

gs_000 -DEVICEamiga_custom examples/tiger.ps

Using this technique you can also tell Ghostscript to output a document directly to a printer. Using the -DEVICEamiga_printer switch it will use the built in Amiga printer driver, but Ghostscript has internal handling for quite a large number of printers such as Epson, deskjet and laserjet printers - standards that many printers can handle. To find out which are supported, type gs_000 -h for a complete list.

HAT GET

The Ghostscript package is freely available for Amiga users from Aminet. So if you are on-line you can download the package yourself. Both the main executable and data file add up to just over 1Mb, so downloading should take about 10 minutes. Otherwise it should be on either the Aminet set box or the latest Aminet CD release, you could also use one of the PD house that offer download services.

So if you are interested in Ghostscript, FTP to your local Aminet site and go to the gfx/show directory. All the Ghostscript related archives start with gs followed by the version number, cur-

If you want the main program itself you have to know what processor you have, as there are a number of different

versions compiled specifically for certain processor types. If in doubt just get the one called gs501 000.lha as this will run on any Amiga. If you know what processor you have and if it has an FPU, go for the correct archive.

Along with the program archive you need the data archive called gs501_data.lha. With these two archives you can get Ghostscript up and running. Extract both the archives and make an assign to the Ghostscript directory called Ghostscript – so the program knows where to look for its files.

You should also consider getting the fonts archive that has all the Postscript fonts you will need. The archive is called gs501_fnts-std.lha and is 1.5Mb but is worth getting if you are going to view a lot of text files.

Viewing or printing text documents is the primary use for Ghostscript



Coloured EPS artwork can be used by Ghost script without a problem

AMIGA COMPUTING OCTOBER 1997

Shafe and ne thing you will notice if you have spent any time down-loading programs from Aminet or have tried them out from the CDs is that, nine times out of ten, the person who wrote the program does not

bled years.

This may give you a warm glow inside, but if the program in question happens to be a crippled shareware product that you have to get your hands on, payment to foreign country is not simplest or cheapest thing to achieve.

come from the same country as yourself. This is somewhat of a tribute to how widespread the Amiga community is, and how the Internet has managed to keep it knitted tightly together over the last few trou-

Your first choice is to send off a cheque or better, a cheque drawn under a foreign bank, but this could cost you or the payee more than the payment itself. So perhaps you could get the foreign cash from a bank and send that off in an envelope – doesn't cost you too much, but there is always the risk it could go astray in the post. Lately, some authors have started to accept credit cards but do you really want to give out you credit card number to some stranger on the other side of the world?

This was just one of many reasons SASG – the Standardised Amiga Shareware Group – was formed in early 1994. Shortly after Commodore went bankrupt, a couple

Amiga Computing takes a look at the long running shareware organisation, SASG, as it enters its third year

of well-known shareware authors got together and their aim was to create a non profit making organisation that would support both the programmer and end user.

Its first objective was to set up a system that would allow the programmer to receive 100 per cent of the registration fee. This system guarantees that software programmers do not get exploited and end users can register high quality applications for around £15.

As the price is low, more end users are

I recently registered my demo of MUI, and was very impressed with the speed and service. If all shareware was so easy to register, I would do it at least once a month! All shareware should be brokered through SASG! Dan Carmack, Missiouri willing to register and support the development of the product. This results in a better maintained product with lots of new features. More recently, SASG has started to offer reduced prices not only to reward users who upgrade to later versions of their registered software, but also for general supporters of shareware.

By the time you read this the organisation's Web site will be just over one year old and has easily topped the 100,000 hits mark, so congratulations are due. SASG

MAD FOR MUI

I think it's safe to say that, over the years, Amiga Computing has been one of the strongest backers of the Magic User Interface. Being the sort of magazine to encourage readers to upgrade their machines, we were never put off by the slightly higher memory and processor requirements MUI needed.

Essentially, MUI filled a gaping hole in the Amiga operating system – a simple way for programmers to add a scaleable, font sensitive interface to their programs – but MUI went beyond even this. Through its object oriented design, each part of MUI is independently upgradable and can be extended by third parties by straight forward MUI plug-ins libraries that can add almost infinite possibilities to the interface.

The flexible nature of MUI has now been exploited by a vast number of programs and that number continues to rise. Currently, the most publicly visible programs come from Vapor Software and its incredible range of Internet software.



As Magic User Interface is a SASG backed product, it has its very own page in the beautiful site style

GET CHEAP STUFF

Well you have read about all the great stuff that is available from SASG and I'm sure you may thinking well I would love to get a registered copy of MUI or MagicWB. In conjunction with the lovely people at SASG Amiga Computing readers who are on-line can register SASG products on-line and receive a 20 percent discount.

All you have to do is get on-line browser to http://www.sasg.com, select the product you want and go to the ordering page. At the bottom there is a cycle gadget from which you will be able to select Amiga Computing. When you have entered all your details the password you need is

Tusken



has not been slow to take advantage of its Web presence – with a Web site you give people all over the world access to your products and any services that you care to provide.

SASG has been quick to explore all possible alternatives and it can now offer almost every type of ordering including conventional mail and fax services. A basic e-mail service that allows users to e-mail their credit card number to SASG is also present and additional protection is avail-

able in the form of PGP protected mails.

For an even more secure form of ordering, there are now facilities to use an SSL capable browser to safely send your credit details in an encrypted message. For added peace of mind, a final option is to use FirstVirtual. This is the first Internet bank, providing a near 100 per cent secure system of ordering products over the Internet using a credit card.

FirstVirtual is so safe because your credit card details are never actually transmitted





over the Internet. When you apply for an account with FirstVirtual you are supplied with a PIN number, this being an alias for your credit card number. Whenever your PIN number is used to make a purchase, a confirmation form is e-mailed to you and you must reply yes, no or fraud before the transaction is made. So if someone does try to use your PIN you will know straight away and purchases cannot be made without your consent.



THAT'S MAGIC

I think MagicWB is really a very cleverly disguised computer virus. If you look at how quickly it can jump from machine to machine, there could be no other explanation. To quote Amiga Magazine, "You'll think you have just bought another computer!" MagicWB transforms your lifeless two dimensional Commodore icons into more dynamic 3-D ones, with a general stone granite feel to them.

One last note. If you were wondering who the artistic genius behind MagicWB is, it is Martin Huttenloher the same person who designed the SASG Website, so it is no wonder they both look so impressive.

No wonder the whole site looks so good, it is done by the man behind the MagicWB icon set



The perfect couple.



For the serious Amiga user.

miga Review is a mail-order magazine dedicated to the serious side of the Amiga market. If you're interested in the more productive usage of the Amiga then this is the magazine for you.

Currently on issue five, the main cover feature looks at the future of the Amiga. We talk to the companies behind the Amiga market, speak direct to Petro Tyschtshenko, and more importantly, find out what you, the Amiga users want.

We give you tutorials on everything from OctaMED to AMOS and C. We have regular columns dedicated to DTP, Coding, the internet, the world wide web, Amiga hardware, Art & Graphics, Music and Business. Amiga Review is now on issue five, and with a cover price of £1.60, what are you waiting for? Got an Amiga? Get Amiga Review. If you don't, we'll just be very upset and cry.



More games than Jo Bra

It's a combination of Mega Lo Mania and Settlers. Gee do you remember Mega Lo Mania? 'The production run's completed'. We can have a voice mimicing frenzy now.





Preview
We look at
Max Rath
is back again.
Once again you can
derive pleasure
bouncing pretend
balls around a table
that doesn't really
exist. Hoo-RAH.





DREAMS
It's an action adventure game.

David wades through 2,000 post it notes on his desk to find a joystick to play it.

≥MediaSoft

For the Amiga gamer.



miga Gamer is the magazine for Amiga games players. In fact it's the only magazine available for Amiga games players. That means we have a monopoly! Wahey.

Every issue, we spoil you with the latest in essential gaming news, in-depth interviews ('Do any of you have beards?' we asked Andrew Reed of Alive Mediasoft), previews of the newest games ('Gilbert Goodmate? Would you be seen buying a game with this name?' we said, strangely enough, of Prelusion's Gilbert Goodmate), reviews, columns, letters (Isabelle Rees is back!) and more. We're more fabulous than any games magazine there ever was. Ever. So, if you want non-stop Amiga games information delivered to your door then Amiga Gamer should be your only choice. For only £1.50.

Ord	er	no	W

Name_____Address_____

_Post Code____

Country_____
Please send this form to MediaSoft Magazines, Communications

House, Isle of Wight, PO37 7LU.
Or call 01983 867377 Or visit

http://www.mediasft.demon.co.uk/ARMagazine/arindex.html

Please send me (tick box)

- ☐ Amiga Review Trial Copy £1.60
- ☐ Amiga Gamer Trial Copy £1.50
- ☐ Amiga Review and Amiga Gamer Trial Copy £3.00
- ☐ Three issue trial subs to Amiga Review £4.60
- ☐ Three issue trial subscription to Amiga Gamer £4.50
- ☐ Three issue trial subs to Gamer and Review £9.00

Please make cheques and POs payable to MediaSoft Magazines

MediaSoft Telling it how it is.

Wordwide

nyone who happens to read The Times or The Daily Telegraph or their on-line equivalents may have heard of a chap called David Hewson. He's a novelist and computer journalist who wrote a column for the former publication which was subsequently published on the Internet. In this he managed to anger just about every non-Wintel computer user in the world by claiming they all used "Zombie" machines which should have been buried years ago.

Every remaining Amiga user knows that the onslaught of the Wintel "standard" has been frighteningly rapid and overpowering. Users of platforms like the Amiga and the Macintosh know their machines have a lot left to offer, but the vast majority of newcomers to the computing world have no knowledge of the vital roles these machines played in computing history and the userfriendly alternatives they offer to Wintel clones.

Hewson claimed that "a tiny minority" of computer users are foolishly ignoring the "industry standard" by refusing to switch to Windows PCs. Although the Telegraph subsequently identified the machines in question ("Acorn computers, the Atari ST, PCs running Linux or OS/2, the Amiga"), Hewson insists that the original article referred primarily to Acorn machines – possibly high-lighting further his curious ignorance of the machine we all love.

Hewson doesn't pull any punches. As the Telegraph feature pointed out, in the past he's called Linux a "nasty piece of digital scurf" and a "program from hell" suitable

Winte/?

Dave Cusick assesses whether the Amiga can realistically play a significant role in the computing world of the future

only for "bug-eyed computer users" whose idea of fun was to "dream in hexadecimal". He's also criticised the Apple Macintosh extensively, and has even gone so far as to call Acorn users "Confused, wacky people, a little like the Tranmere Rovers supporters' club, only less numerous and twice as mouthy". Rather harsh assessments of genuine

computer enthusiasts and sweeping generalisations like these have, unsurprisingly, helped ensure his e-mail in-box has been full of flames over the last few months.

Hewson claims that these days there is no valid reason for not investing in a Windows PC, and that the non-Wintel fans who say otherwise are kidding themselves. Some unlikely candidates have leapt to his defence too - including Stewart Campbell, the former managing editor of Amiga Power magazine, who told the Telegraph that



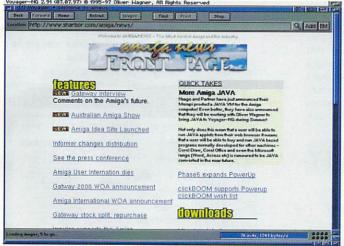
Merapi could help the Amiga adapt to the modern computing world

many Amiga fans have a "siegementality" that is "over the top".

When I originally found out about Hewson's ranting I e-mailed him and pointed out several reasons why I believe that he is wrong to write off machines like the Amiga, and some of these points I feel are worth raising here. As a former writer for ST User

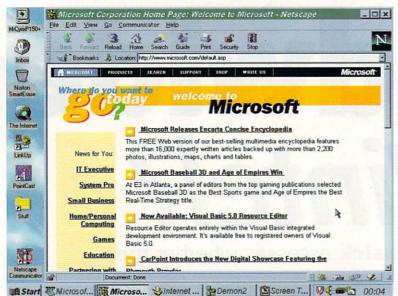
magazine I've been around when a machine has been in its death throes, but the situation regarding the Amiga is rather different. Thanks primarily to the continuing loyalty of genuine Amiga fanatics, a hard core of companies that still develop for the machine and the vocal Amiga community on the Internet, the machine still has a presence - even if it is far less than at the height of its popularity.

As Macintosh users will testify, it's not just stubbornness that prevents non-Wintel users from embracing the Microsoft dream



Amiga News is a great on-line resource you might want to turn to after AC has gone...





Although it may pain loyal Amigans, it's time to accept that Microsoft has become too strong to simply dismiss, or even to challenge head on. In the future Gateway 2000 is going to have to find new strengths upon which to base Amiga marketing

of total uniformity, it's also a genuine belief that the computer world should not ignore a machine which, if not technically superior any more, remains more intuitive, more user-friendly, more flexible and less powerhungry.

Whereas the constant-upgrade mentality and "Bloatware" are now accepted in the PC field, Amiga developers still thoughtfully write software which, while making the most of advanced machine features where available, will run perfectly happily on relatively inexpensive systems.

Admittedly the Amiga is in need of technical development, not having moved on significantly for five years now. But the new Amiga owner, Gateway 2000, is the first company since the Commodore era with sufficient resources to fund this development (even if Commodore did rather less development than it ought to).

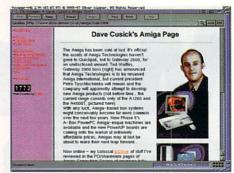
There will always be enthusiasts eager to upgrade their machines using specialist boards from companies such as Phase 5 – and I'm one of them, hankering after a PowerUp board for my A1200 – but these boards are not going to appeal to the mass market or those who aren't "in the know".

If a potential buyer was to walk into a high-street computer shop, the chances are they wouldn't see a single Amiga – and in the improbable event that the shop assistants even knew what one was, they would

be unlikely to be able to lay their hands on anything other than a plain vanilla A1200, a machine which originally appeared in 1992 and has not been updated or improved since. The only other machine in the currently available Amiga range is the almostas-ancient A4000, and there are probably now only a handful of mail-order firms in the UK which could supply one.

Having said that, even today the standard A1200 represents reasonably good value for money. It's not possible to get on the Internet with a low-end Pentium PC for less than around £800, but you could pick up an A1200, a 33k6 modem and a copy of Netconnect for a little less than that and, if cash was tight, you could always skimp on the monitor in favour of a television set. Indeed, it is the Internet which I believe has been a key force in helping the Amiga survive this long, and which I think must play a significant role in its future if that future is going to be a bright one.

But even the Internet cannot alone guarantee the survival of the Amiga. In common with an increasing number of Amiga Netizens I see Sun Microsystems as being its potential saviour, however unlikely that might sound. Far more than simply being a means of producing fancy Web pages, Sun's Java technology offers the possibility of running powerful Java-authored applications from software industry heavyweights such



If you get really desperate for information you could always check out my Web site...

as Corel and Microsoft on any system for which a Java Virtual Machine (JVM) is available.

With the imminent release of Haage & Partner's Merapi, the Amiga will have its first JVM before even Windows 95 has a reliable and popular one. If Haage & Partner get it right, the Amiga could find a new niche as an affordable machine on which to run heavyweight applications without the need for heavyweight hardware. This will give the Amiga an advantage over the similarlypriced NetPCs now being pushed by companies such as IBM and, of course, the Amiga will still be able to do everything a "proper" PC can do, whereas NetPCs won't. Gateway 2000's role must surely be to seize the opportunity and push the Amiga as it hasn't been pushed for years.

David Hewson is right when he says that universal compatibility is the way forward, but he's wrong to claim that switching to Wintel boxes is the only way of achieving this compatibility. Java technology means that users can select the native operating system of their choice, and yet still make use of cutting-edge, heavyweight applications – even Microsoft has seen this, hence its rumoured moves to produce 100 per cent Java versions of industry standard packages such as MS Word.

If the computer world wakes up to the fact that there is an affordable machine which can run that package, while simultaneously splitting CPU time between raytracing an animation and downloading a file from an FTP site, then there may yet be a future for our beloved Amiga.



The Wintel revolution has been frighteningly fast

WEB SITES OF INTEREST

David Hewson's Web Page - http://www.hewson.demon.co.uk/

Gateway 2000 UK - http://www.gw2k.co.uk/

Haage & Partner - http://ourworld.compuserve.com/homepages/Haage_Partner/

Sun Microsystems – http://www.sun.com/

Java FAQ - http://www-net.com/java/faq/

Dave Cusick's Web Page - http://www.dcus.demon.co.uk/

White Knight Technology

AMIGA & Video Editing Specialists FREEPOST ANG6387, WARE, HERTS, SG11 1YA



White_Knight_Tech

@CompuServe.Com

Visa, Delta and Switch 2.5% Surcharge on Credit cards, Not Switch / Delta

WE ACCEPT

Mastercard

Next Day Delivery From Just £ 5.00

Fax 01920

All Prices Include VAT @ 17.5%

We Supply The Entire Range of Accelerators & Graphics Cards From :













68k Series Accelerators



For A3000 / A4000

CYBERSTORM MK2 68060, 50MHz

£ 399 68040, 40MHz £ 245

£ 65 SCSI-2 Controller





For A1500 & A2000

BLIZZARD 2060 & 2040 68060, 50MHz + SCSI £ 399

68040, 40MHz + SCSI £ 245







For A1200 Only

BLIZZARD 1260, 1240, 1230 68060, 50MHz £ 325

68040, 40MHz, Needs tower £ 195 68030, 50MHz £ 95 SCSI Controller £ 65 FPU for 1230-IV £ 45



For A1500 & A2000

150MHz PPC 604e & SCSI-3 with 68060, 50MHz £ 759 with 68040, 40MHz £ 589 with 68040, 25MHz £ 559 180MHz PPC 604e & SCSI-3 with 68060, 50MHz £ 839

with 68040, 40MHz £ 669 with 68040, 25MHz £ 639 200MHz PPC 604e & SCSI-3

with 68060, 50MHz £ 929 £ 759 with 68040, 40MHz £ 729 with 68040, 25MHz Also available without 040 or 060

CYBERSTICES RM For A3000 & A4000

150MHz PPC 604e & SCSI-3

with 68060, 50MHz £ 739 £ 569 with 68040, 40MHz £ 539 with 68040, 25MHz 180MHz PPC 604e & SCSI-3

with 68060, 50MHz £ 799 £ 639 with 68040, 40MHz with 68040, 25MHz £ 599 200MHz PPC 604e & SCSI-3

£ 899 with 68060, 50MHz with 68040, 40MHz £ 729 with 68040, 25MHz £ 669 AMIGA" GOES POWER PC" New Lower Prices

Phase 5 PPC Accelerators are also available without a 68K CPU, for existing 030, 040 or 060 accelerator owners. Call us for further details.
If you already have a Cyberstorm or Blizzard, please call us for special upgrade prices.

150MHz PPC 604e & SCSI-3 No 68k Series CPU 180MHz PPC 604e & SCSI-3 No 68k Series CPU £ 565

200MHz PPC 604e & SCSI-3 No 68k Series CPU





For A1200 Only

175Mhz PPC 603e & SCSI-2 with 50MHz 68030 £ 345 £ 305 without 50Mhz 030 200Mhz PPC 603e+ & SCSI-2 with 68060, 50MHz £ 649 with 68040, 40MHz £ 479 £ 449 with 68040, 25MHz No 68k Series CPU £ 399

24-Bit Graphics Card



CV 64/3D MPEG Decoder £ 119

Hard Drives (3.5") Bare SCSI-2 & ULTRA £ 199 1.2Gb SCSI-2 Quantum

2.1Gb SCSI-2 Seagate £ 249 3.2Gb SC 2 Quantum £ 309 4.1Gb SCE1-2 Micropolis £ 569 4.2Gb S(31-2 IBM £ 529 4.3Gb S'SI-2 various £ 399 4.5Gb SSI-2 Micropolis £ 619 9.1Gb SCSI-2 IBM £ 999

Hard Drives (3.5") Bare E-IDE - For Amiga 4000

9.1Gb SCSI-2 Micropolis

These drives are NOT suitable for A1200 1.2Gb E-IDE

1.6Gb E-IDE 2.1Gb E-IDE 2.5Gb E-IDE 3.1Gb E-IDE 4.0Gb E-IDE

£ 145 £ 159 £ 175 £ 195 £ 215 £ 275

£1029

Hard Drives (2.5") Bare E-IDE - For Amiga 1200 1.0Gb E-IDE Lower Price £ 165

1.4Gb E-IDE £ 179 2.1Gb E-IDE £ 289 Cable, S/W & Screws £ 9 Only when purchasing drive !!

CDROM Drives (Bare)

Internal Fitting - NOT for A1200 8 x Speed SCSI-2 12 x Speed SCSI-2 £ 139 SCSI-2 CD Writers From £ 299 8 x Speed ATAPI/IDE £ 79 12 x Speed ATAPI/IDE £ 89

Cartridge Drives (SCSI)

16 x Speed ATAPI/IDE £ 99

ZIP 100Mb Ext. + Cable & Term £ 149 ZIP 100Mb NEW Internal £ 149 ZIP Disks (Now x 6) JAZ 1Gb Ext. + Cable & Term £ 399 JAZ 1Gb Internal 3.5" version £ 349 JAZ Disks (x 3) £ 249

DAT Drives (SCSI-2)

£ 499 2Gb HP Internal + Fitting Kit 2/4Gb HP Internal + Fitting Kit £ 549 4/8Gb HP Internal + Fitting Kit £ 749 **New Lower Prices**

Memory SIMMS

£ 25 4Mb, 72 pin, 70ns 8Mb, 72 pin, 70ns £ 40 £ 70 16Mb, 72 pin, 60ns 32Mb, 72 pin, 60ns £ 120

Genlocks

LOLA 2000 SVHS & VHS £ 349



LOLA 1500 VHS Only £ 179

Software control. £ 699

electropte-Cooten SIRIUS SVHS & VHS Plus Audio & Chroma Key.

NEPTUN As Sirius, but without audio & Chroma Keyer. New £ 529

Fax / Modems

28.8K External £ 59 33.6K External £ 99 56.6K USR Sportster £ 219

Networking

AMIGANET Ethernet £ 175 £ 179 ARIADNE Ethernet £ 149 Amiga 1200 Ethernet

Monitors

17" Microvitec 1701 £ 399 £219 14" Microvitec 1438S 17" Hi-Res SVGA £ 439 £ 199 15" Hi-Res SVGA 14" Hi-Res SVGA £ 165

Amiga Software

SCALA MM200 PC Version

SCALA MM400

ANIMAGE V1

£ 199

£ 199

£ 149

£ 99

ART EFFECT 2 £ 169 MAINACTOR BROADCAST £ 39 AMIBACK 2 Backup S/W £ 179 CLARISSA Professional V3 £ 109 ADORAGE V2.5 MONUMENT DESIGNER V3 £ 239 MONUMENT CREATIVE CD £ 69

ADORAGE MAGIC Casablanca £ 69 Miscellaneous H/W

ADORAGE MAGIC Movieshop £ 69

PICASSO IV 24-Bit Graphics Card with Flicker Fixer £ 289

Specifications?

If you need technical details on any of our products, call on 01920 822 321 We Still Support The

AMIGA

Farewell Amiga Computing .. Look Out For Our Adverts In **CU AMIGA MAGAZINE** From now on

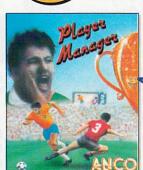
Always call first to verify price & availablility before placing an order. Many prices subject to exchange rate E & O E - 21/07/97

Telephone: 01302 890000 Fax: 01302 890010 South Y 15 Guildhall Industrial

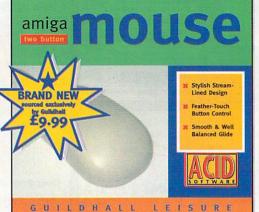
Guildhall Leisure Services Ltd

PROUDLY PRESENT....

AMIGA Software



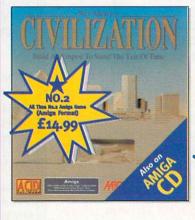
£9.99



AMIGA Software



£9.99









The ultimate office package.









The latest in the classic Deluxe Paint range.

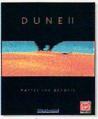




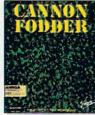
Sensible Golf



£14.99



Dune 2 £14.99



Cannon Fodder £14.99



Overlord £14.99

Available from Electronics Boutique, GAME & all good independents.

think it is a sad reflection on the current Amiga scene that so much time and effort is being put into developing these Internet tools. I forgive the mad dash for an Amiga browser, that is as about as exciting as the Internet gets but really, a news reader?

In reality there are only three real reasons people use newsgroups. Firstly to get dirty pictures, the best way to get people to register a news reader is not to allow them access to the alt. groups, as discovered by the writer of NewsAgent. The second reason is to allow small minded people to argue with each other over the most trivial of points. I wouldn't mind but most of the people that inhabit newsgroups cannot even put together a coherent argument, never mind respond correctly to one.

The final reason is quite a respectable one, to get information or answers to a question. As newsgroups are an open forum, however, one of the lovely people from group two could always jump in. If they do, just ignore them, think of them as that drunk on the bus.

This review is of New York, a new Class-Act based newsgroup reader. I would expect most people to be using either Tin, NewsAgent or a combination of the two for their news browsing pleasure. Together they do make a good combination, Tin for off-line reading and NewsAgent for batch downloading or on-line browsing.

Batch downloading is an important ability for a news reader as it allows dial up users to log on, get all the messages they are interested in, log off and then read the downloaded articles. This obviously saves time being on-line, as you can then take your time reading and replying to articles while off-line.

So New York does have a bit of competition to contend with. From the start you can tell this is not an off-line reader as you have to have to be on-line before it will run, bit of a give away that.

In use as an on-line reader, the current version of New York does a reasonable job. You can subscribe to groups added either What the hell, I can mention the Spice Girls if I want, it's the last issue. I like Victoria I do

Girl from a downloaded groups list or a group's

name entered by your good self. You can then get a list of subject headers and, from there, read and reply to postings, or if it is a binary uuencoded file the file will be decoded to the New York directory.

If you can be bothered, New York will download a complete newsgroup list. While this can be helpful to track down some of the more unusual groups, it will take at least 15 minutes as there are tens of thousands of groups, and even the file containing their group headings is over a megabyte.

Once you have the list, New York does makes a good job of displaying it. Using a cascading style list, groups under the same heading are grouped in collapsible folders, much the same as Mac list views.

New Agent works alright as an on-line reader, but really I am not very keen on the single interface. The view for the groups and subject headers is far too small and you cannot resize it, either through the interface

or via the preferences, but a separate window would be

The lack of any batch downloading and off-line reading abilities is a shame and is something that does need addressing. If it comes to spending 10 minutes downloading files or spending an hour on-line, I think you may go for the first option.

What annoyed me about this news readers is its handling of multiple parts binaries. I have vet to see a browser that makes a good job of collecting these parts together, or generally automates the downloading and decoding of the parts, but then that is a general fault of most news readers and not just New York.

So, New York, this is version one so there is a long way to go. To be honest, adding the simple batch downloading of NewsAgent would make a big difference.



Flipping through news groups has never been so easy

Groups	and the made desired (in section 1) in male		
TAL	Subject		Dyfen
	Re WTB Com X	Narrabasi key gunide (Harsin Vesten) (1321 7008 student un edu au (Rod Ja	1260
	Re WTB. Pete Rose Persont Fever by Camestar et Re YES to graphic cards games!	seter colò aci com (Peterco) James Vidiotti" samesviotò nospam	728 4226
	NO Re: YES to graphic cards games!	Sareth / verethy@netcona.co.us/	1905 1905
	Re Zork 1	comptoné typicon unel com (Jasén)	1302
	Da Pattintas (to. 1963, an at account	Lifect and A business is another the Atlanta	2055
EXITS		o 🚱 🗇 🦂 🐠	0.5
From fo	cheral informatik turmuerchen de		
Sales Re	s YES to graphic conds games! Aux 1992 DD 00 00 GMT		
n (about)	IT, I wouldn't make a RISC in my Ami).		
Take a loc	is through some old magazines about the plans arround	ed by Commodore	
It saved	everything went under. To an extent, I'm glad they di the OS and saved us from NT.	a go bararupt.	
ut that we	s after years of too title money. I meant more money of	sach	
1000/A1	time between CRC and ECS A2000/A800 with AGA (A) 200 with AAA with the A1200 nather being expunsion	icon, e desktop,	H
an A2000	its mostly clear 03 coding already at AAA, we'd corre- /A1800 AAGA (3), being a chipset of somewhat about 5	chien	
DECEMBER OF THE	gts-RIDC etc. uppraciable with never versions just like		
320 (AR	00) would already have had all the gfu-outlering stuff a 2003 would introduce VM, new prot, a net stuff	to an include the property of	
	e were running DS + 0 with bytecode compline to		A
Alkalous de	Pastr		X

New York's single interface makes its easy to navigate but a little harder to flip throught the subjects

Bottom

E URINA	11110	
Produc	T DETAILS	
Product	New York	
Supplier Finale Developme		
Price	\$35	
E-Mail:	Info@Finale-Dev.com	
www:	www.Finale-Dev.com/	
Sc	ORES	
Ease of use	90%	
Implementation	60%	
Value For Money	65%	
Overall	70%	

ast month I was going a little crazy over ArtEffect. From the quick look at the preview it seemed pretty incredible, but now I have managed to have a good old dig around and get a proper idea of just how good, or bad, ArtEffect 2 really is.

Version 2 adds a couple of very important new features. Firstly it has internal virtual memory, essentially this should allow you to work on images of any size. Unfortunately this does not work quite so well in practice for AGA users, as there still are chip RAM limitations - limiting you to around 800x600 pixels. The second new part is layers, but you should read the box out to learn more about

One part of ArtEffect that needs work is the way selections are handled. Currently, selections (and also layers) are very much static - in no way can you move them. It is always useful to be able to 'nudge' selections, particularly when superimposing layers, as you are never happy with the first position.

True enough you can go through the brush manager to pick up a selection as a brush and then position it that way. This does work very well, but seems an odd way of

going about it. In my humble opinion, a move tool would do the job much better - it works for Photoshop.

If you take my layer tutorial for example. Once you have slapped down the flower image it is pretty much stuck in place (unless you are prepared to cut the image back off the layer and reposition it). If you could copy

Some bloke called Neil reviews ArtEffect 2

over the selection and move it around everything would be so much easier.

You may have noticed that my enthusiasm for ArtEffect has subsided a little as some of the limitations become evident. ArtEffect has a lot of potential, all the right elements are in place, it just needs a little more spit and polish before it is a first class program.

Bottom

REQUIREMENTS

RED essential BLACK recommended

3 Mb

Hard drive

30Mb Hard drive



RTG card 040 CPU

RODUCT DETAILS

Product	ArtEffect 2		
Supplier	Blittersoft		
Price	ArtEffect 1.5: £59.95		
	ArtEffect 2: £119.95		
Tel	01908 261 466		
E-Mail	sales@blittersoft.com		
www	www.blittersoft.com		

SCORES

Ease of use	90%
Implementation	80%
Value For Money	85%
Overall	85%

Everyone seems to be comparing ArtEffect with Photoshop, which is fair enough and, with the addition of layers, the likeness will be even more obvious. It's one thing to say ArtEffect is like Photoshop, but is it as good as Photoshop?.

Sure, the interface is court-inducingly close to Photoshop's, so it has the look, but has Haarge and Partner re-created the feel of Photoshop? The best way to find out is to try and reproduce a picture done with

I have used one of the more advanced tutorials from the Photoshop 3 manual that involves knocking together a picture using a few layers and makes full use of the program's selection and drawing tools.

The actual project is to be made up of a number of separate images from the Photoshop CD. Originally most of the images had transparent backgrounds but, as these can only be used in Photoshop, they had to change to flat Jpegs which makes using them a little more complicated.



PART1

Well, here we are at the start of the tutorial. I have all the pictures on hand (four in all) and I have the Photoshop tutorial in front of me. Initially, the picture that is going to be the background is loaded and a new layer can be added to the picture in preparation for the flower image that will be the first to be overlaid.

Next I load the flower picture. The first task is to cut out the flower from its green background. Like Photoshop, ArtEffect offers a number of selection tools, for this task the colour selection tool is chosen. This allows you to choose specific or general ranges of colours from a picture and mask them out. As the flower is generally red on a green background, by using the dropper tool, you can select a range of greens from dark to light and mask out the background

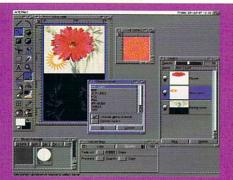
PART2

When it came to transferring a selection from one image to another, I ran problem. ArtEffect simply refused to copy



the selected area to the clipboard, it just said it could not. The only way to get the selection is to grab it as a brush and transfer it to the main pic-

This applied to every picture I had to add, as you can see with the next sun image. Load in the pictures, use the magic wand selection to remove the white background, grab the unselected sun area as a brush and then paint this onto a new layer underneath the flower picture, but still over the main background image



PART3

What's all this about then? Well an interesting point is that ArtEffect still uses what looks like the normal IFF-ILBM to save its layered pictures. This means a program such as FastView can still view the background image, but the other layers are stored in the file as a new alpha block that are simply ignored by programs that do not recognise them, very neat but then the IFF file format is very neat.

One other point — if you notice in the layer window the opacity of the sun layer has been set to 50 per cent, this allows you to make the layer more or less see through. If you look at the times in the top right of the screen grabs, you will probably notice that it took me the best part of a day to do — it's all the ruddy interruptions I get all day



PART4

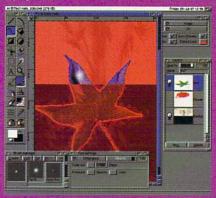
The next step is to add the leaf to the picture, so you just add a new layer, right? Well in Photoshop, yes, but in ArtEffect no. ArtEffect can currently only handle a maximum of three layers, which seems a touch limiting if you ask me. So before the leaf can be added, a layer had to be freed up, this requires us to merge the flower and sun layers. Very straightforward, just drag the sun layer to the flower layer in the layers window.

Now the third new layer can be made – the usual shenanigans of cutting out the leaf and adding it to the new layer. In Photoshop the leaf would still be a selection you could rotate, but with ArtEffect everything has to be handled as a brush, but this works pretty well. The white outline of the leaf is my fault, I should have expanded the selection by a pixel or two to get rid of it, ho hum

PART5

In this part a couple of things are going on. Firstly, if you take a look at the layers window, you will see that I have hidden the flower/sun layer, this means any further changes will only affect the leaf and background images. You do this by simply clicking on the light bulb icon.

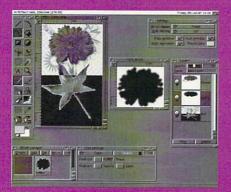
The second thing going on is that currently the only effect that can be applied between layers is the opacity, in Photoshop a much larger number of operations can be performed. So if you want some sort of image processing performed between images on different layers you have to do it all by hand. Using the magic wand and selection tool made it easy to single out the overlaying leaves



PART6

To help highlight the flower from the rest of the picture, a drop shadow needs to be added underneath it. Now in Photoshop this is a piece of cake, or pie, if you're Russian (watch 2010, or read the book it's better). With Photoshop everything is on its own layer, you can easily grab the flower's outline as a selection, paint it black on a new layer, blur it, merge the shadow and flower layers and Bob's your father's brother.

With ArtEffect all this has to be performed as a separate project, then copy the shadow image as a brush to the new middle layer, sorry I merged the leaf and background layers to free the third layer up. Oddly,, filters did not seem to work on the layers, only the background base layer. This meant the blur had to be performed in a separate project, not a good feature



PART7

The final step. This involves adding the year to the bottom of the pictures and applying a white to transparent gradient to the text. Sounds simple enough — click text tool, choose CGTriumvirate sized 95 and bold for extra thickness, drag the new text into position and press space to fix the text to the new layer. So far so good, now for the gradient.

This is where a problem cropped up, how do I do a gradient? Now it is probably my own fault for not looking hard enough, but to set up a gradient you first open the colour manager select range, drag and drop the colours you want in the range. Go to the fill tool, switch to graduate, click where you want the gradient to go and then select the gradient direction. Transparent gradients do not seem to be possible, so a white to black range had to suffice.



PART8

The finished picture, the ArtEffect version is on the left and the original Photoshop one is on the right, if you hadn't guessed. To start with the white outline around the leaf is my fault and wouldn't be there if I did this again.

Due to ArtEffect's limitation on moving layers and selections, the position of the leaf and sun are wrong and to move them afterwards is very difficult. The last major problem is the text, firstly it is not anti-aliased, giving the jagged outline and also no transparency could be applied.

So the main problems encountered are due to the poor selection handling and the current limitations of the layer system. Remember that this was my first attempt to do something substantial with ArtEffect. If I had another attempt the finished product would match the Photoshop version much better, save for the text transparency





ALITY PD & SHAREWARE

The LEADER OTHERS CAN ONLY FOLLOW!

FREE FRIENDLY HELP BY POST or PHONE ANYTIME: FREE CLUB MEMBERSHIP FREE CLUB MEMBERSHIP
PICK YOUR OWN PROGRAMS!
BY NAME NUMBER AND SIZE!
IT'S EASY!
500k makes 1 bootable disk!
800k makes 1 non-bootable disk!
FREELY UPDATED CATALOGUE
WITH FULL DESCRIPTIONS
INDEX & VIRUS CHECKER ONLY £!!
Phone for the LATEST PROGRAMS!

PO Box 672 South Croydon Surrey CR2 9YS Tel: 0181-657 1617

1-3 disks £1.50 ONLY #1 25!

FREE P&P



Genlocks • Accessories **Printers • Monitors • Speakers** Complete Amiga/PC Systems Support Services • Books File Conversion/Photo scan Multimedia • Design • Video

MOVING AMIGA TO PC? PHONE!

01328 862693

email - chromanet@aol.com web - http://members.aol.com/chromane With free software, quiz, info news & links

Tel 01257 400097 Fax 01942 497928 E-Mail: ssamiga@warp.co.uk For a FREE catalogue of the latest and best in Amiga Public Domain software simply send us your name & address and a loose stamp

send us your name & address and a loose stamp
PD prices: I-10.....80p; II-20.....70p; 2I+.....60p
Postage & Packing is free on all PD orders – Local orders qualify for free delivery
All orders are sent First Class and we only use new TDKFirji disks
Phone now for details of our Amiga User Group (Wigan/West Lancs)

SES PD (Dept AC), 79 Woodnook Road, Appley Bridge, Wigan, Lancs WN6 9JR
Amiga enthusiasts catering for Amiga enthusiasts!
SES welcome any enquiries from new and experienced Amiga users alike



FREE PD SOFTWARE

AMIGA - PC - All Commodore Call (0181) 651 5436 or

Write to 45 Brookscroft, Linton Glade, Croydon CR0 9NA www.icpug.org.uk

Independent Computer Products Users Group

THE BEST AMIGA USER GROUP IS 15 YEARS OLD!!!!

To celebrate Chic Computer Club is now offering amazing half price subscription to its unbeatable User Group Service. Members get great discount offers, thousands of new contacts, free help & advice, gigabytes Group Service. Members get great discount offers, thousands of new contacts, free help & advice, gigabytes of free PD/Shareware from our exclusive BBS. Regular newsletter. Second-hand hardware, service. Plus: Now also FREE internet Home Page and E-Mail address, and FREE advertising on our Internet site.

Plus Full Internet Connection for LESS THAN £1.00 per month!!!!

PreUsed 3.5" DS/DD Disks just 7p each (+p&p)

Find out what you're missing by sending an SAE for our FREE intro pack to:

C.C.C. (AC18), P.O. Box 121, Gerrards Cross, Bucks, SL9 9JP. (01753) 884473

We also offer groups for IBM/Apple/Atari/8 Bits/Consoles/Fantasy/SCI Fi Gamers and Midi Music users Trade and Dealer enquiries welcome. Web Page at HTTP://www.uk-main.com/chic

CLASSIC AMIGA PD software

ULL RANGE OF PD SOFTWARE CD-ROM, CD32 AND ACCESSORIES AMIGA GAMES AT SPECIAL PRICES PHONE FOR FREE CATALOGUE DISK 0161 723 1638

11 Deansgate, Radcliffe, Manchester Open 12-9pm 7 Days

Are you finding it hard to get software for your Amiga? Well help is at hand. We are now in our sixth year of supplying Amiga public domain/share-ware and have no intention of stopping. So why not claim your FREE catalogue, listing all

PATHFINDER PD (AMC),
PATHFINDER PD (AMC),
West Yorkshire BD16 4NQ

Web site: http://www.pathpd.demon.co.uk JUST CHECK OUT OUR PRICES! 100 Disk Labels 61.45; Mouse Mat 61.99 Disk Drive Cleaning kit 62.50 Have you also got a PCT Then why not send for our UAE package? It contains Windows 95 and Dos versions of the Amiga emulator for the PC Dlus some Amiga programs to get you going — ONLY 62 (supplied on PC HD disks – Access to an Amiga required)

& SERVICES Amiga & PC Specialists

We offer a wide range of Amiga & PC Services

Amiga PD – over 6000 PD Titles – Prices 75p per disk + 50 P&P – Int Floppy & PSU repairs, Business Card, Leatlet & Presentation Design & Printing Service, plus many other Services.
For free Catalogue Disk & Information, CALL

Computer Systems & Services 16 Elizabeth House, Durham Ave, Gidea Park, Romford, Essex RM2 6JU

Amiga Services & Information Please make Cheques & Postal Orders payable to M. J. Bixby

PC & APPLE MAC
We also provide PC - Repair - Upgrade &
Custom Building Service, for all you PC buffs for
more information CALL
Louise 01708 799151, PC ONLY
Apple Mac Services CALL 0850 585 337

PRICE OVER-RIDE. We can't be beaten on price by a <u>FULL £2</u> our mail order price is too high, or if the product you want is not listed, we'll give you <u>22 OFF</u> the lowest advertis price in this magazine, subject to stock. Just phone 01279 600204 and tell our staff the price YOU expect to pay.

WE GUARANTEE YOUR TOTAL SATISFACTION - OR ALLYOUR MONEY BACK

A500 Software

CENTERFOLD SQUARES
CHAOS ENGINE 2 92%
COLONIZATION
COLOSSUS CHESS X
COVER GIRL STRIP POKER
CRICKET CAPTAIN CRICKET COLLECTION VOL 1
INTERNATIONAL ONE DAY CRICKET,
TEST MATCH CRICKET, BATTLE FOR
THE ASHES 9.49 CRICKET MASTERS
DAILY DOUBLE HORSE RACING
DELUXE PAINT 3
DESERT STRIKE
DOGFIGHT
DUNE DUNE
2 - BATTLE FOR ARRAKIS
EURO LEAGUE MANAGER 2MB
F1 MASTERS
F117A NIGHT HAWK
F15 STRIKE EAGLE II
F19 STEALTH FIGHTER
FIELDS OF GLORY FOOTBALL COLLECTION VOL FOOTBALL DIRECTOR 2 FOOTBALL GLORY FOOTBALL MASTERS OSSIBLE MISSION 2025 IMPOSSIBLE MISSION 2025
KINGPIN
MICRO FRENCH (8 TO ADULT)
MICRO GERMAN (8 TO ADULT)
MICRO MATHS (11+)
MINSKIES FURBALLS
ODYSSEY
PGA TOUR GOLF PINBALL DREAMS PINBALL FANTASIES

PINBALL FAN IASIES
RAILROAD TYCOON
REACH FOR THE SKIES
RUGBY COACH
SENSIBLE GOLF
SENSIBLE WORLD OF SOCCER 9097
SENSIBLE WORLD OF SOCCER
DATA DISK 96/97
SETTI EBS

SETTLERS
SILENT SERVICE 2
SIMON THE SORCERER
SPECIAL FORCES
STARLORD

| THEME PARK | TOTAL FOOTBALL 80% | THEME PARK | TOTAL FOOTBALL 80% | TO A1200 Software

GUADIAN COMPLIA

GUADIAN ROACKIL

SUPER SKIDMARKS

FOR

1.49 41 LINE BREED 30 2 85%

1.199 CHAOS ENDINE 2

3.99 COLONIZATION

1.499 FEARS

1.149 FIELDS OF GLORY

1.999 GLOOM

1.149 GLOOM DELUVE

1.290 LIGGENDS

1.290 MINSKIES FUBBALLS

3.99 PRIMBALL PRELUDE

5.99 PRIMBALL PR

A1200 DESIGN PACK DESIGN & PRINT PACK FOR A1200 CONTAINS WORDWORTH 2.0, DELUXE PAINT IV AGA, PRINT MANAGER, OSCAR & DENNIS

CD32 Games

ACID ATTACK COMPILATION GUARDIAN, ROADKILL, SUPER SKIDMARKS ACTION PACK VOL 1 LEGENDS, FEARS, GLOOM PC CD TOP 10
 SIMON THE SORCERER
 12.99

 SPECIAL FORCES
 8.99
 AMIGA EMULATOR
 15.92
 SECRETS OF PROVIDE RESPONSE OF SIMICITY PLOYED AND STARLORD
 5.99
 SECRETS OF SIMICITY PLOYED AND STARLORD STARLORD
 29.99
 SECRETS OF SIMICITY PLOYED AND STARLORD STARLORD
 29.99
 SECRETS OF SIMICITY PLOYED AND STARLORD STARLORD
 29.99
 SECRETS OF SIMICITY PLOYED AND STARLORD
 29.99
 SECRETS OF PROVIDING PLOYED AND STARLORD
 29.99
 SECRETS OF PROVIDING PLOYED AND STARLORD
 29.99
 AND SECRETS
 29.99
 AND SECRETS

14.99 MOTO RACER WIN95
18.99 PREMIER MANAGER 97
3.99 THEME HOSPITAL 91%
13.99 X-WING VS TIE FIGHTER WINS
5.99
PLAYSTATIO
17.99
PLAYSTATIO PLAYSTATION

TOP 10 12.99 DIE HARD TRILOGY 93%

3.99 EXHUMED

AND TO BLACK 90%

FADE TO BLACK 90%

MACHON MACHINES 39 9%

ANGER RACER

4.99 SOUL BLAGWARS

9.99 TOMB RAIDER 95%

17.99 V. RAILY

N64 TOP 10

11.99 BLAST CORPS
9.99 FIFA SOCCER
21.49 INTL SUPERSTAR SOCCER 64
12.99 KILLEN ENSTROT GOLD
12.99 MARIO KART 64
17.49 SHADOWS OF THE EMPIRE 90%
17.49 SHADOWS OF THE EMPIRE 90%
17.49 9 PLOT PROS AUTHORITY OF THE STANDOWS OF THE SOME SHADOWS OF THE EMPIRE 90%
19.90 TURNO FINOSALIFICATION OF THE STANDOWS **SATURN TOP 10**

14.99 DARK SAVIOUR
13.99 FIGHTERS MEGAMIX
34.99 MANX TT 91%
NIGHTS + JOYPAD 96%
ROAD RASH CK BOAD RASH SATURN BOMBERMAN 90% SHINING THE HOLY ARK 93% THEME PARK 92% VIRTUA FIGHTER 2 98% 9.99 WORLDWIDE SOCCER 97 94%

BOOKS

AWESOME SNES SECRETS 3 8.99 .14.99 COMPLETE IDIOTS GUIDE ...14.99 DUNGEON MASTER HINT BOOK . 8.99 MORE C++ FOR DUMMIES 26.99 .9.99 PLAYSTATION SECRETS, STRATEGIES AND SOLUTIONS 15.99 SECRETS OF FRONTIER ELITE 29.9915.99 SECRETS OF SIMCITY 20009.99

SPECIAL RESERVE MEMBERSHIP GIVES YOU 10 ISSUES OF THE SPECIAL RESERVE CLUB MAGAZINE Our 48 page full colour magazine, with news, reviews and thousands of products

ALL OF THIS

Buy any one item from our entire catalogue at the same time as joining for a year (CT 50) or Toylor time as joining for a year (£7.50) or more and we'll give you

A FREE COPY OF EDGE MAGAZINE

The future of interactive entertainment magazine Worth £3.50, FREE to new members. THE CHEAT ZONE Service States Steel 17 April 1988 Court

THE SPECIAL RESERVE **BOOK OF 1001 CHEATS** Cheats for games on most console and computer platforms

AND all of these fantastic gifts below absolutely free. FREE AMIGA MEMBERSHIP PACK

Zeewolf 1 & 2, Football Glory and Quickjoy footpedals

CONTROLLERS QUICKSHOT 137F PYTHON ... 11.99 WITH AUTOFIRE



ALFA MEGAMOUSE 400 ... 13.99 400 DPI, 2 BUTTONS

LEADS JOYSTICK EXTENDER CABLE 10.99 SCART LEAD CD32 TO SCART TV



AMIGA PARTS COMMODORE AMIGA POWER SUPPLY ...27.99

EXTERNAL DISK DRIVE FOR AMIGA OR SX-1 47.99

EXTERNAL 28.8 FAX MODEM 69.99
SMALL COMPACT DESIGN,
COMPLETE WITH CABLES,
INTERNET BUNDLE AND FREE
STARTER GUIDE ANTI-SURGE 4 WAY TRAILING MULTI-PLUG

24.99 ANTI-SURGE 6 WAY TRAILING MULTI-PLUG INTERNAL DISK DRIVE FOR A1200/A600 FOR A500 .10.99 170MB 2.5" INT HARD DRIVE 79.99



Special Reserve 01279 600204

OR FAX YOUR ORDER ON 01279 725842 - WE'LL FAX BACK TO CONFIRM OPEN 9.30AM TO 8PM (MON-SAT) 10AM TO 5PM (SUN & BANK HOLIDAYS)

We only supply members but you can order as you join

We only supply members but you can order as you join
Trial Membership only 50p
Trial Membership only 50p
Trial Membership only 50p
Trial Membership (UK) £6.00
ANNUAL MEMBERSHIP FEES UK £6.00 £C £10.00 WORLD £12.00
Members receive ten issues of the colour club magazine per year, a free copy of EOGE, Book of 1001 Cheats and a choice FREE gift when you by any item
as you join. There is no obligation to buy anythin when you by any item
(as you join, There is no obligation to buy anythin example the second of the secon

nter membership number (if applicable) or EW MEMBERSHIP FEE (ANNUAL UK £6.00) OPTIONAL first class post add 50p per item OPTIONAL fast delivery on hardware add £3.00 LL PRICES INCLUDE UK POSTAGE & VAT heque P.O. Mastercard/Creditcharge/Switch/Visa

OVERSEAS SURCHARGE \$2.00 PER ITEM - CREDIT ristol Shop Special Reserve at



PO Box 847, Harlow, CM21 9PH
We are mainly mall order but we also have
Four impressive
Special Reserve Shops

CARD ONLY

Bristol Avon 351 Generation Ro (A38) Chelumsfore, Essex 43 Broom 11/2 Meet from the centre, Main Kirk Sale Mean the Bris Saltern O117 924 5000 01245 348777 O117 924 5000 States Room (A17 Salter Room (A17 Salter

Some titude souder in the score power at 1 sections con the two potent process We GUARANTEE TOTAL SATISFACTION! I nevitably some products listed may not yet be available. Please phone to check availability. Prices may change without prior notification. SAVE = Saving off full recommended price. Sent to press 25.7.97 Errors & Ommisions Excluded. Inter-Mediates Ltd, The Malings, Sarbridgeworth, Herts CM21 9PG

NINTENDO 64 £139.99 including controller PLAYSTATION £121.99 includes controller and 'Demo I' (D O% FINANCE AVAILABLE on selected recognision and not see death

Words of the past, words of the present and words for the future. Nine years of reader letters with Amiga Computing



ISSUE 2 JULY 1988

Mistakes

I enjoyed reading issue one, especially the bit about Workbench 1.3. How much is it anyway? There was an error in the Plain Man's Guide to CLI. the author said that it is important to use capital letters. He is wrong, it doesn't matter whether you use upper or lower case. The Amiga treats it the same.

Now on to the hidden messages. For the last message, you omitted to mention that you must hold down the function key while you eject the Workbench disk and replace it with a none Workbench disk. Leszek Wolnik-Kurjanowicz, Ealing

Piracy problem

I was very interested to read in your first issue about the sales of the Amiga catching up with those of the ST. I work in a shop in London where we sell all kinds of computers, and the Amiga runs only to Amstrad PCs. But ST software outsells Amiga products. I attribute this to the lack of really good Amiga games and the huge amount of piracy on the Amiga.

DON'T WRITE IN!

Well thanks for all your letter over the years, most have been very complimentary, others have been quite constructive, while others have been down right abusive, even so brought a wry smile to all our faces.

If you have any comments on the Amiga or Gateway 2000 why not send them to Amiga Doormat as I'm sure Mr Ben Vost will be more than happy to listen to all your gripes, oh yes he will.

Most of the games are straight ST conversions. If I wanted an ST I'd have bought one, but the Amiga has far better graphics and sound. Piracy is a serious problem, and I implore Amiga owners to buy their games and not copy them.

If you have a stolen game which you play a lot, go and buy the original to show the software house how much you appreciate the game.

This is the only way that software houses can be persuaded to carry on supporting the Amiga. One good thing is the bundled software which comes with the ST. Every Atari comes with loads, which will cut down the number of new games ST owners will buy, and so makes the Amiga sales look proportionately better.

Your first issue was great, keep rooting for the world's best computer.

Alex Walsh, Newbury

This issue an external drive cost £100, an A500 cost £400, 512K cost £105 and a 20Mb hard drive would set you back £625

ISSUE 5 OCTOBER 1988

Hard discount

At last a top quality magazine specifically to support a top quality computer. Congratulations on your first two issues, and good luck for the future.

Why is it that I can buy a 20Mb hard disk for an IBM PC compatible for about £200, whereas a similar product for the Amiga costs £500? OK, so I know that there are economies of scale and that some components are different, but the majority of the components must be broadly similar – the disk, the controller and so on – but 250 per cent more?

Now if somebody could develop a cheap (£100?) board that would allow

an IBM hard disk card to run on an Amiga...
Martyn de Young, Kent

Hop to it

While on holiday this year doing the rounds of the amusement arcades, I could not get my wife away from a game called Frogger. She normally hates the arcades but loved Frogger. I own an Amiga 500 computer and was wondering if you would know how I could obtain this.

D. P. Bowles, London

SSUE 20 JANUARY 1990

Narrow minded

Why isn't the Amiga better known? I bought a modem and was having trouble with using a bulletin board. So I asked the sysop for help, telling him I was using an Amiga 2000. Displaying as much intelligence as a boiled potato, he asked if that was a PC or a modem.

Of course I explained that the Amiga is an advanced 68000 based multi-tasking system with graphics and sound processors which make the IBM look like a bad dream Sir Clive once had. But how do we get it through to the people in suits that the world of computing is much more exciting when you wiggle out of the big

blue straight jacket? Gerry Hall, Antrim.

This issue an external drive cost £75, an A500 cost £290, 512K cost £40, a 20Mb hard drive would set you back £300 and Commodore launch the A2500.

AMIGA COMPUTING OCTOBER 1997

SSUE 10 MARCH 1989

Girls in computing

I am fed up with the way women are treated in computing. I've got a BSc in computer science and know what I am talking about. However when I go into a computer shop to ask about Amigas, the sales men all talk down to me. I am told how I could use Superbase Personal to keep recipes and how educational it could be.

I know these things. What I want is advice on what compilers are available, what the operating system is like and how to really get the most from an Amiga.

In the end I bought a machine from a cut price mail order company. I would have paid the full price, but only if the company offered decent back-up.

Tanya Al-Rais, Kent

JANUARY 1995

Art for arts sake

For some time I have been growing increasingly disenchanted with Amiga Computing, for a number of reasons:

The indiscriminate use if irrelevant electronic symbols linking text and headings. To anyone with the slightest knowledge of electronics, the apparent random use of symbols such as a battery, a transistor, a capacitor or other components when completely irrelevant to the text is simply nonsense and misleading.

The typeface generally used for the headings is also irritating and interrupts smooth reading. X and H appear very similar, to mention but one detail, and the whole affect is most unattractive. Your review of PageStream 3 makes me wonder whether I am using the same program. When my copy arrived a couple of weeks ago it was a disaster, to put it mildly, although after two updates from the Net it is a little better.

In addition, the arrival of December issue in mid-October seems utterly ridiculous.

Your review of PageStream 3 makes me wonder whether I am using the same program as you are. When my copy arrived a couple of weeks ago it was a disaster, to put it mildly, although after two updates taken from the net it is certainly a little better.

I have been using PageStream with various updates for some years and have found it excellent until version 3, but surely your marks in 'the bottom line' are somewhat over-enthusiastic to say the least?

This issue an external drive cost £55, an A1200 cost £240, 1Mb cost £20, and a 200Mb hard drive would set you back £200

Pircay is not a crime

Most decent games cost over 20 quid. My friends and I get about half that every week in pocket money. The only way we can afford games is by clubbing together.

But I'm not going to fork out a fiver when my mate Rob gets to take the game home and I don't get to play it. So we copy it. If we didn't we wouldn't buy the games. I don't see why this should be illegal.

Starglider shield

Do I detect slight radiation from the planet Argonaut in reply to Omar Farooq's query (Starglider slug January 1989) as to why Starglider II runs slightly slower on the Amiga than the ST? If you treat the Amiga like an ST it will run slightly slower. It is more sensible to treat it like an Amiga. The whole point about the blitter is that it will co-process with the 68000 if the code is properly written. Used in this way it is very much faster than native 68000 code at screen operations.

Writing portable code to make life easier when you move programs from one machine to another makes commercial sense, but does not have a profound effect on the hardware.

To put it another way: My neighbour's push bike is a hell of a lot faster than my XR3, so long as I don't turn the engine on! Jim Hawkins, London

I SSUE 86 MAY 1995

A helping ear!

I have only been using my Amiga 1200 for a year now and have tried reading numerous magazines. Out of all of them I prefer your magazine as it is easy to read and you give away some excellent disks.

However, I have encountered problems on two of your disks, Easy Amos and Anim Workshop. These, I think, could have been cleared up in a matter of minutes but instead I have to write in with the problem and wait for a reply.

Why don't you have a helpline so you could make things easier for everyone? This is the only reason I have not subscribed to your magazine. Please consider this...

Brian Goodfellow, Northumberland

In the past Amiga Computing ran a coverdisk helpline as a permanent feature. However, over recent months we've been running without a full-time coverdisk editor and unfortunately, until this situation is resolved I'm afraid the coverdisk helpline will remain inactive.

However, when a replacement is found, rest assured the helpline will reactivated. If anyone out there is interested in the job feel free to send an application. Please mark your letter RE: coverdisk editor application.

Editors note: So I did apply, and I got the job, and here I am today. Funny old world isn't it?

ISSUE 69 JANUARY 1994

Cream crackered

I hate cream crackers, I really do. Apart from the fact that they always fall apart when you try to butter them and they stick to the roof of your mouth, their buttersmeared flakes are a hell of a job to clean off floppy drives.

I hate four year-old sprogs playing with my disks even more. "OK son, just leave my disks alone or you'll break them. Where's the rest of your cream cracker, the bit you haven't spread all over my disks?"

The next day I found the soggy cracker when I tried to load a game into my Amiga. Yep you could say the disk drive was literally cream crackered.

The guilty party was confronted with the evidence. "But son, why did you do it?" I asked. "Well," came the reply, "it's the same shape and it did fit." Huh! "Anything fits if it's covered in butter, I muttered."

Mother acts for the defence: "Well if you

won't let your kids play with real disks, what else can they play on the Amiga with?" Good grief! I really do hate cream crackers. Steve Clarke, Kempston.

Impossible upgrade

Will there ever be an upgrade kit for the A500 to make it into an A1200? There was the ECS chip set upgrade and Kickstart 2.04 chip to make it into an A500 plus, so why not another jump up the ladder?

I don't want to get rid of my beloved A500 if I can avoid it, as I have too many peripherals which use the DMA slot. These would be useless on the A1200 unless someone was to produce an adaptor. Any chance of this?

Colin McGrain, Aberdeen

This issue an external drive cost £55, an A600 cost £190, 512K cost £20, and a 200Mb hard drive would set you back £300

Are you wanting to connect to the Internet?

1. Comprehensive Software ALL YOU NEED TO CONNECT AND SURF THE INTERNET

NetConnect provides you will all you need to connect to the Internet - full TCP stack, web browser, mail, news, ftp., irc and telnet clients. You don't need anything else, no need to worry about additional software. The CD version even includes pre-configured MIME-types for web browsing), datatypes, additional online documentation and more!

2. Commercially Licensed NO SHAREWARE - FULLY LICENSED SOFTWARE

NetConnect is a suite if commercially licensed Internet software which means there is no need to register any of the core modules contained within the package - no time limitations, no hassle. All the software contained within NetConnect are arguably the best in their class Net Connect controls the modules with a unique floating (or fixed) icon bar (which can be altered and new icons added to the bar) which means everything is just one click away!

NetConnect is, of course, fully supported and the modules contained within Net Connect will be supported by the authors with minor upgrades, enhancements or bug fixes.

-3. After Sales Support THE BEST FREE SUPPORT - GUARANTEED

We pride ourselves in offering superb after sales support to all our NetConnect/Internet users. We guarantee you will not get better free Internet related support from any other rival company, Support via telephone (Mon-Fri 10am-6pm), e-mail, mailing list (general NetConnect forum) and the web site (www.amigaworld.com/netconnect).

Our aim is to help users with their Internet connection after they have purchased Net Connect and we understand that the Internet can be a daunting experience for the beginner.

Issue 2 of our Internet magazine 'Internet Informer' should be available within September. This is a quarterly magazine with the latest information about the Internet and your Amiga NetConnect users receive this magazine free of charge!

STFax Professional [available September]

STFax Professional is new commercial fax program for the Amiga containing the sort of advanced fax features you would find within commercial PC fax software. STFax has been in the shareware for the last few months, and the brand new commercial "professional" version offers even more advanced features plus some voice control for voice modems.

- Support for all modern classes (1, 2, 2.0)
- Voice control use your Amiga as a digital answer machine etc!
 Phonebook (store all your favourite fax numbers)
- Scheduler (store fax messages to be sent at specified times)

A3000/4000 or a A1200 tower). High-speed buffered parallel option available. These cards are currently the fastest serial cards avail-

Hypercom3Z Zorro-II 2 x 460,800bps highspeed buffered serial ports £79,95 1 x 500K bytes/sec buffered parallel port

Various Modem Pack Options

PK03 33.6 Modem & NetConnect & STFax

1 x 460,800bps highspeed buffered serial port 2 x 460,800bps highspeed buffered serial ports £79.95 1 x 500K bytes/sec buffered parallel port

able for the Amiga, making the Internet work faster for you!

Machine Specifications

- Reports

Hypercom3 A1200

- ARexx port
 Datatypes support for image conversion
- Printer driver to redirect all print-outs to a fax file (print from Wordworth, Pagestream etcl)

The **Hypercom** range of high-speed serial cards offer your Amiga the fastest connection to the Internet, for comms and for fax transfers. Available for the Amiga 1200 (these serial cards are

Various money saving packs are available. These are all based on either the 33.6k or 56k modem plus a a collection of extras. Call us for other pack options if you have your own pack idea!

PACK CONTENTS

PK04 33.6 Modem & NetConnect & Hypercom1 & STFax £149.95 PK05 33.6 Modem & NetConnect & Hypercom3Z & STFax £159.95

placed within a previously unused expansion port - leaving the PCMCIA port and trapdoor free!) and zorro-II/III based machines (zorro version suitable for

Viewer for viewing outgoing/incoming fax messages

High Speed Serial Cards

NetConnect v2

NetConnect v2 is even easier to connect to the Internet! Launch the new Wizard GUI, choose your modem, enter a few user details and let the Wizard do all the rest for you! Simple, with version 2 you don't even need to worry about the provider - everything is automatic, everything is point and click! *Amiga Format* concluded about NetConnect v1 (June 97 issue): "Almost the perfect package for the Amiga Internet user", "If you need to get online, this is the easiest way to do it" and "It's good value for money too - especially the bundle including the 33.6K modem." We have listened to our NetConnect v1 users noted their comments and added some other new features. NetConnect v2 is available on CD-rom and floppy disk. Specifications include:

- New AmiTCP NetConnect v2 users will be the first people to use a version of the new AmiTCP! We have added a number of changes to this new version - the main additions are the new Wizard, MUI based dialler and 'events' control.
- AmiTCP Wizard makes configuring your ISP a doddle. Choose your modem, enter some user details and then the rest of the process is completely automatic! This is true Windows95™ style connectivity! See the two example pictures point and click Internet configuration!

 New programs - NetInfo and X-Arc (X-Arc is a brand new
- WinZIP™ style archive management tool. Downloads Iha/Izx files from Voyager/AmFTP/Microdot-II, auto-extracts them into X-Arc's GUI and allows you to control the files.
- Programs are now keyfile based (can be used with any TCP stack - Miami etc)
- Extras pre-configured MIME types (CD only), datatypes (CD
- Only), online help files etc
 Updated, latest versions of the modules (Voyager,
- Microdot-II, AmIRC, AmFTP etc)
- Printed installation/introduction guide install NetConnect
- Printed manual using the Internet and NetConnect
- Plus many more smaller changes and additions

AmiTCP is a new full TCP stack, enhanced and developed by us and NSDi with full GUI control!

VOYAGER-NG

Voyager Next Generation is already powerful with javascript, frames, tables, SSL (https:) etc! MICRODOT-II

AMFTP

The industry standard FTP client and the num-ber one FTP program on the Amiga.

AMIRC Again, the industry standard Amiga IRC client -said to be better that its PC and Mac rivals!

AMTELNET

Use AmTelnet to maintain your web site, connect to external computers, play online games! NET INFO

NetInfo is a new program by Oliver Wagner to search the net - traceroute, ping, services etc.

AMTERM

Brand new DOpus like archive management tool which integrates with the NetConnect package!



Wizard - Loginscript Recorder



Wizard - Configuration Completed

£52 95

£54.95

£call!

£18.00 £18.00

NetConnect v2 Upgrade from v1/v1.1 [registered NetConnect v1/v1.1 users oply] Latest Technology Modems

K56Flex modems are here! Download software and web pages upto twice the speed of a 28.8 modem. 56k modems will operate at 33.6K speeds for uploading but you can cut your phone bills drastically when using the 56K technology! Isn't it about time you upgraded that 14.4 or 28.8 modem? For further information about the new K56Flex (Rockwell developed) technology contact us!

We only supply quality branded modems (Dynalink UK Ltd), which may cost slightly more than their unbranded competitors, but they ship with a 5 year warranty, the knowledge that a UK company offers support/information and you are buying a modem with quality (Rockwell based) components.

NetConnect v2 CD [contains many extras: datatypes, MIME types (for www browsing) and much more]

NetConnect v2 Floppy Disks [only contains the core programs & online help documents]

K56Flex modems need to connect to another K56Flex modem in order to use 56K technology (make sure your provider supports K56Flex technology). Call for further technical details.



Quality branded Dynalink modem (supported by Dynalink UK Ltd)
 -33600 bps DATA/FAX/VOICE modem - true v34. Throughput to
 115,200 BPS via V42 bis data compression
 Group 1, 2 & 3 send/receive FAX (14.4)
 -Voice Commands - DSVD upgradeable (by software)
 -Voice Commands - DSVD upgradeable (by software)

Noice Commands - USVD upgraceacie (by soliwate)
-Auto Answer
-Full Duplex Speaker
-Full Duplex Speaker
-Call Discrimination
-Fax on demand
-Simutianeous voice and data (S.V.D.)
-Message playback via sound card / speaker or headset
-Auto moda daterction allows modem to connect with a m Auto mode detection allows modem to connect with a modem that

is configured for differing connection modes

Extended AT (Hayes compatible) command set

Upgradable ROM chip (safeguarding against future specifications)

Opgraduate Row chip (saleguarung against nutre specind BT and CE Approved Amiga 25pin and Surf Squirrel/PC 9pin serial cable included With Headphones and Microphone 5 year warranty - also undergone rigorous Amiga tests

ADD £25 for a 56k Modem (instead of the 33.6k model)

- All packs come with one month free connection to a major Internet Service Provider
 Other options may be available call

PK01 33.6 Modem & STFax

PK02 33.6 Modem & NetConnect

Choose between the CD or Floppy disk version of NetConnect with your modern pack
 STFax Professional will be despatched on release

Send your order to: Active Software, PO Box 151, Darlington, County Durham, DL3 8YT, ENGLAND.





POSTAGE/DELIVERY

£15 for Saturday deliver

osite. We can accept credit or orders. For any additional info call us ASAP!

WANT MORE INFORMATION?

£ 89.95

£109.95

We provide an information pack covering NetConnect and the modules (Voyager, MD-2 etc), the modems we offer, connectivity discounts and a set of frequentely asked questions and answers. Ask us to send you an info pack!

You can also access the NetConnect homepage for additional info, latest news and to download a time-limited demo version of the software: http://amigaworld.com/netconnect

VAPORWARE PRICES

If you are not interested in buying NetConnect, you can still buy Vaporware Products individually:

Voyager Next Generation AmIRC

AmTalk AmTelnet + AmTerm Package Deal S% Discount when 2-4 Vapor products are bought, 10% Discount for 5+
 Note that the <u>Vaporware</u> products are e-mail only but can be sent on floppy for a surcharge of £2.00 per product.

155UCS UK only

Missed an issue of Amiga Computing?

Do not fear! Simply fill in the coupon and one will be winging its way to your doorstep!

Back issues order Form

Simply send a cheque or postal order for just £4.50 made payable to IDG Media.

The magic address is Amiga Computing Back Issues, IDG Media, Media House, Adlington Park, Macclesfield, SK10 4NP.

Please allow up to 28 days for delivery.

☐ Issue 99 - May 1996	£1.00	☐ Issue 111 - April 1997	£4.50	☐ Issue 114 - July 1997	£4.50
☐ Issue 102 - August 1996	£1.00	☐ Issue 112 - May 1997	£4.50	☐ Issue 115 - August 1997	£4.50
☐ Issue 106 - December 199	6 £1.00	☐ Issue 113 - June 1997	£4.50	☐ Issue 116 - September 199	7 £4.50
Name					
Address				Service Control of the Control of th	
			Pos	st code	
Tel					
Please tick if you do not wish to receive further	r information or	speciai otters.			

Special Offer: 1996 issues only £1 while stocks last



Amiga 1200 Magic Packs 68020/14.3MHZ 2MB RAM

2MB RAM No HD



ALL MACHINES ARE FULL UK SPECIFICATION AND COME BUNDLED WITH WORDWORTH V4SE (WORD PROCESSOR), TURBOCALC V3.5 (SPEADSHEET), DATASTORE V1.1 (DATABASE), PHOTOGENICS V1.2SE 170MB HD & PERSONAL PAINT v6.4, ORGANISER v1.1, PINBALL MANIA, WHIZZ AND NOW DIRECTORY OPUS 4.12!

ALL HARD DISK MODELS ALSO INCLUDE THE ABOVE SOFTWARE & SCALA MM300 PRE-LOADED,

THE OFFICIAL AMIGA HARD DISK MANUAL & HD INSTALL DISK.

68020/14.3mHz 6MB RAM SCALA MM300

68030/40MHZ 10_{MB} RAM 170MB HD SCALA MM300



Low Cost 14" Monitor 15KHZ ONLY TV DISPLAY REMOTE CONTROL AMIGA CABLE SUPPLIED

PROFESSIONAL 14" MONITOR MULTISYNC 15 - 31.5KHZ FLICKER FREE DISPLAY AMIGA CABLE SUPPLIED

68040/25MHZ 18_{MB} RAM 1.3GB HD SCALA MM300 250w PSU

68040/40MHZ 34_{MB} RAM 1.3GB HD SCALA MM300 250w PSU

HARD DISKS Complete Expansion Kit Solution for the Amiga A1200

YEAR WARRANTY

YES, AT LONG LAST, A PROFESSIONAL WAY TO INSTALL A HIGH CAPACITY HARD DISK WITHOUT REMOVING PARTS FROM YOUR MACHINE OF PROVING PARTS FROM YOUR MACHINE OR BENDING YOUR KEYBOARD AROUND THE DRIVE, OUR PACKS COME WITH EVERYTHING YOU NEED TO INSTALL THE DRIVE INTO AN A1200, CABLES FOR

POWER AND DATA, INSTRUCTIONS & 7 DISKS FULL OF HOT SOFTWARE SUCH AS DIRECTORY OPUS 4.12 (WORTH £50), MUI 3, MCP, GALAGA AGA, VIRUS CHECKER, MODS, REORG, ABACKUP AND MUCH MORE. ALL SOFTWARE CAN BE INSTALLED WITH OUR CUSTOM CLICK 'N' GO SYSTEM. ALL DRIVES ARE PRE-INSTALLED WITH THE SYSTEM SOFTWARE & ABOVE DISKS - UNLIKE OTHERS WE PROVIDE THE 1.3GB £159.99 DISKS JUST IN CASE!

WANT US TO FIT YOUR HARD DISK FOR YOU? CALL FOR MORE DETAILS.

by Qualified Technicians

ALL ÁMIGA COMPUTERS COVERED PRICES FROM AS LITTLE AS £29.99 MANY REPAIRS BY WIZARD REQUIRE NO PARTS

PRICES INCLUDE INSURED COURIER COLLECTION & DELIVERY, LABOUR, FULL DIAGNOSTICS, SERVICE TEST & VAT. PRICES INCLUDE

FAST TURNAROUND COLLECTION & DELIVERY

ALL TECHNICIANS ARE FULLY TRAINED & QUALIFIED UPGRADES BOUGHT AT SAME TIME FITTED FREE!

90 DAYS WARRANTY ON ALL

ALL FOR JUST £ 29.99 + PARTS

PARTS

WE HAVE A LARGE RANGE OF PARTS FOR ALL AMIGA'S - DRIVES, KEYBOARDS, MOUSE PORTS, CHIPS AND MORE. PLEASE CALL FOR

560 DPI 3 BUTTON MICE & MATS for all Amigas & Atari STs

AWARD WINNING

560DPI RESOLUTION

2.5_{GB}

◆ 90% RATING IN CU AMIGA

 MICRO SWITCHED BUTTONS ◆ AMIGA/ATARI ST SWITCHABLE . ALL 3 BUTTONS CAN BE USED WITH MANY

THIRD BUTTON DRIVER DISK

BEIGE OR BLACK £ 2.99 MAT £2.99 OR £1 WITH A MOUSE

DIRECTORY

THE ULTIMATE WORKBENCH REPLACEMENT & FILE MANAGEMENT SYSTEM

COMBINES THE EASY TO USE WORKBENCH ENVIRONG THE POWER OF OPUS IN ONE ◆ REPLACE AND ENHANCE WORKBENCH ◆ OPUSFTP TO OPEN AN FTP SITE AS A FILE LISTER ◆ INTERNAL MULTI-

NOW SHIPPING TASKING SO YOU CAN



NOW

PERFORM MULTIPLE FILE OPERATIONS SIMULTANEOUSLY (WORKBENCH CAN'T!) ◆ FILE-TYPE SPECIFIC PULLDOWN MENUS

HOTKEYS
SCRIPTING

£ 7.99

. EXTENSIVE DRAG 'N' DROP THROUGHOUT ◆ ADVANCED AREXX

SUPPORT . PICTURE, SOUND & FONT VIEWER . MUI & NEWICONS SUPPORT . SORT FILE LISTS & DISPLAY VERSIONS AND FILETYPES . CYBERGRAPHIC SUPPORTED

Workbench 2+ & Hard Disk Required







EMULATION, DYNAMIC COMPILATION FOR FASTER EMULATION, UP TO 16MB SHIPPING ACCESSIBLE UNDER MS-DOS, MDA, CGA, EGA, VGA & SVGA SUPPORTED, UP TO 256 COLOURS ON AN

AGA MACHINE, CYBERGRAPHIC SUPPORT, MULTIPLE HARD DISK FILES OR PARTITIONS SUPPORTED, CD-ROM AND HIGH DENSITY DRIVES SUPPORTED, RUN MS-DOS APPLICATIONS IN A WINDOW ON WORKBENCH! RUN WINDOWS 3.1 IN ENHANCED MODE! MANY TIMES

QUICKER THAN VERSION 3.1 REQUIRES KICKSTAFT 2.0 OR ABOVE & A 68020 PROCESSOR OR BETTER.

POWER-UP YOUR AMIGA WITH THIS 250W
ENHANCED AMIGA PSU
FOR LITTLE MORE THAN

R LITTLE MORE THAN

THE PRICE OF A NORMAL 25-30W AMIGA PSU!

POWER SUPPLY

POWER SUPPL DESIGNED FOR A500/600 & 1200 (CD32 ALSO

AVAILABLE). ENCASED IN STEEL SUBSYSTEM, ALL CABLES SUPPLIED, WHISPER QUET FAN, ILLIMINATED ON/OFF SWITCH, MONITOR OUTLET ON BACK OF PSU, ONLY QUALITY/NEW PSU'S USED, 3.5" & 5.25" POWER CABLES
AVAILABLE TO POWER EXTERNAL CD-ROMS HARD DISKS ETC.

POWERSTRIP

POWER 4 NORMAL PLUGGED DEVICES (MONITOR, PRINTER, SPEAKERS ETC) DIRECT FROM THE BACK OF POWERBOX, TURN ALL PRODUCTS ON/OFF WITH JUST ONE SWITCH £19.,

TURBOPRINT 5

Printer Enhancement Software





PRINTER - YOU MUST GET TURBOPRINT, IT RADICALLY ENHANCES THE PRINTOUTS YOU NORMALLY GET BY REPLACING THE AMIGA PRINTER SYSTEM WITH THE FASTER AND VISIBLY BETTER TURBOPRINT SYSTEM.

OPTIONS INCLUDE POSTER

INTING, COLOUR CORRECTION, DITHERING, COLOUR BALANCING, On-Screen Preview and Much More... Most printers are supported - call to check. Version 5 includes "Graphic PUBLISHER* TO LOAD MULTIPLE PICTURES, INDIVIDUAL COLOUR CORRECTION, ROTATE, TWIST AND MORE. ENHANCED TRUE MATCH COLOUR CORRECTION, NEW DRIVERS FOR HP, CANON, EPSON STYLUS AND CITIZEN MODELS. AMIGA FORMAT £49,99

WE ARE OPEN 9AM AND 5.30PM, MONDAY TO

SATURDAY, TO PAY BY CREDIT CARD. TO PAY

BY CHEQUE OR POSTAL ORDER PLEASE SEND YOUR ORDER TO - WIZARD DEVELOPMENTS,

PO BOX 490, DARTFORD, KENT, DA1 2UH



COMPATIBLE WITH ALL AMIGAS . HIGH QUALITY SONY DRIVE ◆ ROBUST METAL CASE ◆ ANTI-CLICK AS STANDARD ◆ ENABLE/DISABLE SWITCH ◆ LOW POWER CONSUMPTION ◆ THRU



41200 Expansion Cards

SPEED INCREASE OF UP TO 27 TIMES ◆ 68030/EC, 68040 OR 68060 PROCESSOR RUNNING AT 33, 40 OR 50MHz ◆ MMU IN ALL PROCESSORS (EXCEPT 68030EC TYPE) 040 FITS STANDARD A1200 - NO PROBLEM & IS SUPPLIED WITH A HEATSINK & FAN ◆ UP TO 32MB

OF RAM CAN BE ADDED ♦ KICKSTART REMAPPING (EXCEPT 68030EC VERSION) ♦ OPTIONAL SCSI-II INTERFACE ♦ CAN ACCOMMODATE A 72-PIN SIMM ♦ 68040/60 HAVE BUILT-IN FPU ♦ BATTERY BACKED CLOCK/CALENDER ♦ PCMCIA

COMPATIBLE SO YOU CAN STILL USE PRODUCTS SUCH AS OVERDRIVE HD OR CD/ZAPPO CD-ROM OR SQUIRREL ◆ ZERO WAITE STATE DESIGN

SCSI-II INTERFACE FOR THE MAGNUM 68030/68030EC/68040 & 68060 CARDS - SUPPLIED WITH SOFTWARE - £79.99

8MB 4_{MR} 16MR **OMB** ′030/33 & FPU :89,,, £109.99 £129.99 1030/40 (68030EC CHP) 289.99 £109.99 £129.99 £159.99 £209,99 '030/40 & FPU £99.99 £119.99 1030/50 e119. e139. e159. '040/25 & FPU £179.99 £199.99 £219.99 £249.99 1040/40 & FPU £229.99 £249.99 £269.99 £299.99 1060/50 & FPU £349 £369 £389 £419 £419



SPEED INCREASE OF 2.3 TIMES - 2.88MIPS . AVAILABLE WITH 0, 4 OR 8MB OF 32-BIT RAM INSTALLED . USES A STANDARD 72-PIN SIMM . OPTIONAL PLCC TYPE FPU (FLOATING POINT UNIT)

INSIDER GUIDE - A1200 INSIDER GUIDE - A1200 NEXT STEPS

INSIDER GUIDE - WORKBENCH 3 A TO Z TOTAL! AMIGA - WORKBENCH 3

MASTERING AMIGADOS 3 - REFERENCE

MASTERING PROGRAMMING SECRETS

INSIDER GUIDE - ASSEMBLER
INSIDER GUIDE - DISKS & DRIVES

TOTAL! AMIGA - AMIGADOS TOTAL! AMIGA - AREXX

TOTAL! AMIGA - ASSEMBLER MASTERING AMIGA SCRIPTS

MASTERING AMIGA BEGINNERS

MASTERING AMIGA PRINTERS

AMIGADOS PACK

◆ BATTERY BACKED CLOCK/CALENDER ◆ FINGER CUTOUT TO HELP Installation ◆ Trapdoor Fitting - Doesn't void Warranty ◆ 0-4mb

PCMCIA COMPATIBLE (FOR USE WITH OVERDRIVE, SQUIRREL ETC.) • ZERO WAITE STATE DESIGN.

OMB 4MB 8MB

RAM8 £39., £59., £79.,

RAM8 £54.9 £74.9 £94.9

£14.95

£14 95

£19.99

£21.99

£19.95 £19.95

£19.95

£21.95

£34 99

FROM

EASYLEDGERS 2 - THE ONLY LL ACCOUNTS PACKAGE, AMIGA FORMAT GOLD CALL ABOUT TRAIL OFFER - HARD DISK & 2M RAM REQUIRED - £119.99

GP FAX - SEND FAXES TO AND M YOUR AMIGA. EVEN FAX DIRECTLY FROM UR APPLICATION. AMIGA FORMAT GOLD - AMI COMPUTING 9/10 - FAX COMPATIBLE MODEM

IMAGEFX 2.6 - THE MOST COMPLET IIGA, AMIGA FORMAT GOLD - CU AWARD - 21 & HARD DISK REQUIRED - £179.99

33MHz FPU KIT PLCC TYPE FPU & CRYSTAL MOST CAROS - CALL TO CONFIRM - £29.9 A500 512k RAM Expansion £14.99 A500PLUS 1 MB RAM EXPANSION £19.99 A600 1MB RAM EXPANSION £19.99 ALL WITH A FREE ONLS 4 WORTH OVER £50

50 25/DD Disks & Colour Labels 100 2S/DD DISKS & COLOUR LABELS

4MB 72-PIN SIMM £20 8MB 72-PIN SIMM £40 16MB 72-PIN SIMM

€70 32MB 72-PIN SIMM ALL SIMMS ARE NEW

CONTACT US ON INTERNET

2 BOOKS (DISKS & DRIVES & WORKBENCH 3 A TO Z), A 90

REFERENCE USUALLY £43.94 - SAVE NEARLY £9 2 BOOKS (INSIDER A1200 & NEXT STEPS), A 60 MINUTE VIDEO, 4 DISKS OF PD TO GO WITH THE BOOKS/VIDEOS A1200 WORKBENCH 3 BOOSTER PACK £39.95

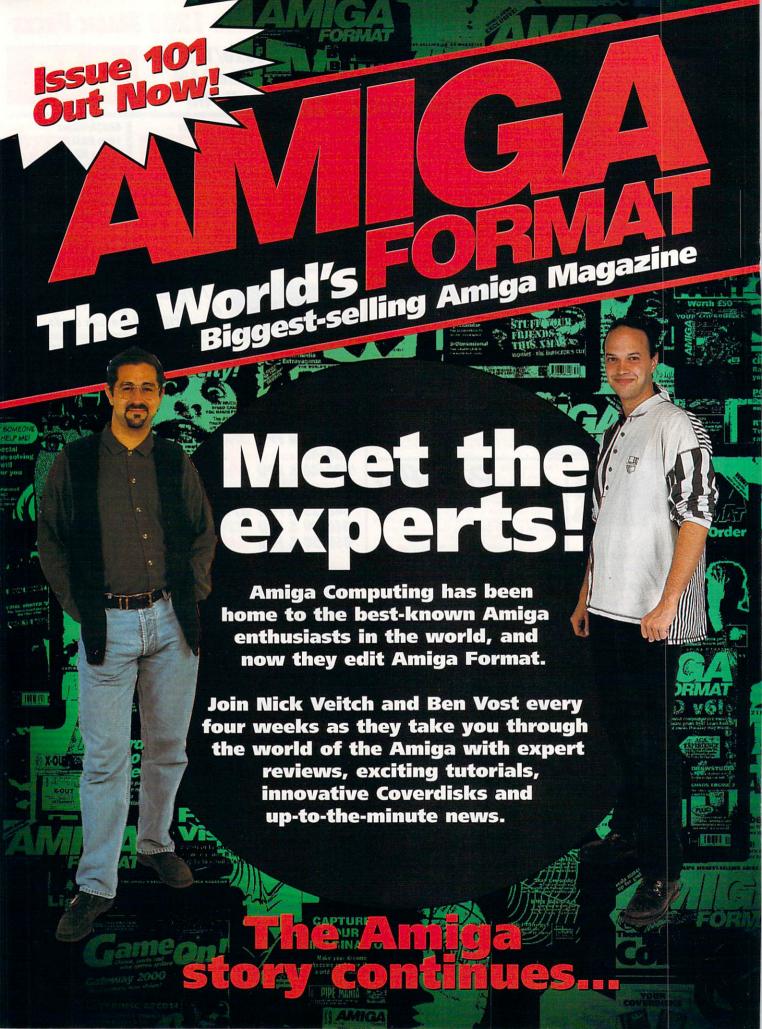
TOTAL! AMIGA - AMIGADOS & MASTERING AMIGADOS 3

MINITE VIDEO. 1 DISK & REFERENCE CARD ** BUY 2 OR MORE BSB PRODUCTS **

** AND GET 10% OFF! **

WITH POWERCOP

DEVELOPMENTS



TOP 10 TIPS

Having used an Amiga for the last seven years or so, Neil Mohr has picked up a little knowledge about them. Before he disappears into the editorial wilderness, he would like to bestow this knowledge to you, our beloved readers, oh yes he would, so shut up and bloody listen.

1. Wait for ALL disk activity to STOP

This must have killed more files, disk and hard drives than anything else. Before you pull out a floppy disk or reset your machine, or just go on to use another program, wait for your last program to finish writing to the disk. The classic is pulling out a floppy disk before a program has finished writing to it and usually results in lots of read errors and a reformat of the disk, so no big problem.

The big problems start when you interrupt writing to you hard drive, either by resetting it (naughty) or a program happens to crash while another is writing to drive (annoying). This will general result in the drive becoming invalidated, and more often than not the file system cannot fix the fault itself.

The only way to fix this is to resort to a third party program such as DiskSalv or AmiBack. These will scan your hard drive and fix or remove any problems they come across.

2. Have an emergency recover disk

Related somewhat to tip one. If you have a catastrophic hard drive problem that destroys your boot partition you are going to need an escape route allowing you to get your drive back up and running as easily as possible.

The simplest way to create this type of disk is to make a copy of your original Workbench disk. To do this insert your Workbench disk in internal floppy drive, select the disk icon and from the Icon menu select the copy item. You of course need a blank floppy before you do this. The only program you really need is your file recovery program, either DiskSalv or AmiBack. Both are around 200k, so before they can fit, a few files need to be removed from the copy of your Workbench disk you have just made.

Right, we're going delving around the Workbench files. Double click the disk icon, select the window that has just opened and from the Window menu choose show/all files. Next delete the Utilities drawer, don't need any of that stuff.

Open the System drawer, select and delete; FixFonts, Format, NoFastMem, RexxMast and DiskCopy as none of those are really needed. Now go into the Libs drawer and delete, rexxsyslib.library, rexxsupport.library and amigaguide.library. Finally, from the C drawer you can get rid of Ed and Edit, you should now have more than enough room for either DiskSalv or AmiBack.

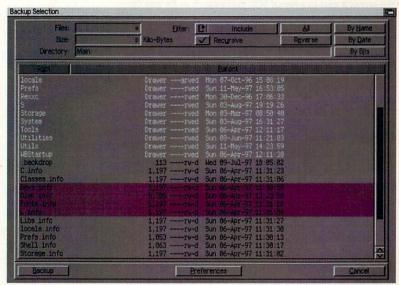
If you want more room you can delete the following quite safely; everything found in the L drawer; amigaguide.datatype in the Classes/Datatype drawer and the printer.device from the Devs drawer. The whole idea is that if the worse should happen you always have something to fall back on, so keep the disk in a safe place – but not so safe you forget where it is.

3. Constantly save your work

No matter which type of computer you use this tip will always hold true. I do not trust computers, there are so many reason why they can just stop working and take all the work you have done that day with it. So every time you stop to think press that right Amiga and S key, I just did then. If the program supports autosave then use it, but even so save regularly yourself. It is a good habit to get yourself into, sometimes I find myself saving work after the end of every sentence.



This month's ACAS has been unexpectedly taken over by the surprisingly sober Neil Mohr



AmiBack has saved the Amiga Computing hard drive many many times over the years

4. Get to know your Amiga

Again, this is a tip that holds true for any type of machine. Try and learn a little about your Amiga, you do not have to know everything, but by reading problem pages you will start to recognise symptoms for common problems that arise. Things like assigns, wrong library files, badly configured DOSDrivers are common problems that are easily fixed if you have the basic knowledge and skills. So if you come across the problem, you can diagnose and fix it yourself.

5. People without hard drives

For anyone that bought their Amiga (and is still using it) without one, a good tip is to go out and buy a hard drive right now. You have no idea what a hard time you are putting yourself through. If you own an A1200 I'm sure you could pick up a second hand 40 or 80Mb IDE drive for next to nothing from a PC shop. For modern PCs, drives of that size are useless but Amiga users can still get away with such small drives. Personally I would still recommend going for at least 500Mb, but then my Workbench is 100Mb.

6. Separate Workbench partition

One way to save yourself a lot of grief is to make sure you have all your important Workbench files stored on a separate partition, then have all your program and data files stored on another partition. This reduces the chance that you could destroy your boot Workbench partition, so making it impossible to boot your machine, as you are more or less exclusively using your work partition.

Here at Amiga Computing towers, we have a separate 120Mb Workbench drive and a 1.2Gb Work drive and I cannot remember once losing the internal drive to validation errors - the external drive is another story, at one point it was going down several times a day.

7. Upgrade vour machine

It is the one thing I have never regretted doing. Through all the years, whenever I added to my Amiga, the pay back was always instant and obvious. With my A500, extra memory allowed me to do more, and an external hard drive let me do it more quickly.

On my A1200 more memory made the machine twice as fast and allowed me to use much larger documents and graphics A monitor allowed me access to 1:1 ratio screen modes and a larger work area. The Surf Squirrel greatly improved Internet access and the access it gave to external SCSI devices such as Zip and CD drives made my life much easier. Finally, with a fast accelerator, a half gigabyte internal drive and access to virtual memory I am never left wanting with the A1200.

8. Get these programs

As there has been no development of the operating system since the A4000 came out back in 1992, the Amiga still lacks some fundamental necessities and more general points that would make it a polished product. To get around these limitations I suggest you get the following programs (all these have been on past Amiga Computing disks, but if you have missed some here is the list). They are all PD so will not cost you an arm and a leg.

MCP or MultiCX - Either of these will do, personally I go for MCP but many still prefer the simpler and smaller MultiCX that also does an admiral job of fixing all those little holes in Workbench and AmigaDOS

MagicMenu - simply makes those dull pull down menus a much more pleasant experience

ToolManager - Whether you use version one, two or three this is the best way to add menus, Applcons and even docks to Workbench

WBStartup+ - Adds extra control to your WBStartUp drawer

ClassAction - A multifile recognition program that allows you to handle all your different file types through a single program icon

SwazInfo - Replaces the rubbish Workbench icon information window with a much better one

PowerSnap - Written by Nico Francois, PowerSnap gives as close to global cut and paste as the Amiga is going to have

KingCON - Replaces the old Amiga Shell with a far superior version with menus and a scrollable buffer

9. Backup your files

One thing that is mentioned more than any other but rarely per-

formed is backing up your program and data files. There are a few ways to go about it. Either back your entire drive up, this takes ages and is not really necessary. Secondly, you can have a single drawer in which you store all your data files and simply back this up. This is very quick and as long as you store away all your original program disks if you do lose your drive you can get back your all the important files.

The final way is to rely on the Amiga's archive bit, every file as an archive attribute bit attached to it. A backup utility will set it and if at any time after your last back up the file changes the bit is unset and next time you do a backup this is noted and the new version is backed up again. Personally, I go for the second option.



ABackup is a wonderful backup program

10. Get on the Internet

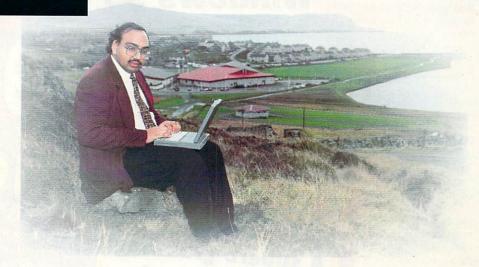
Magazines like Amiga Computing are all very well and good, they do provide good expert information of the latest Amiga products as well as tutorials, tips and news, but anything that appears in print is generally at least a couple of weeks old before you get your hands on it, simply due to the printing process.

If you want to get the latest Amiga news, information and programs you need to be on-line. Internet services such as IRC allow news to be passed on almost instantly, and superb Web sites such as the Web directory and Amiga Flame give a central hub for the collection of Amiga related news and developments.

The Internet also offers the best way to get hold of the latest PD and shareware programs from Aminet and, with just about every company now on-line, it is easier than ever to get product support via e-mail and downloadable program updates from their related sites.



For the man in Shetland who was worried about paying 'through the nose' for what was advertised as a service 'without the excess'....



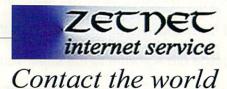
Zetnet Services explain why some providers can be a false economy.





☑ info@zetnet.net

http://www.zetnet.co.uk

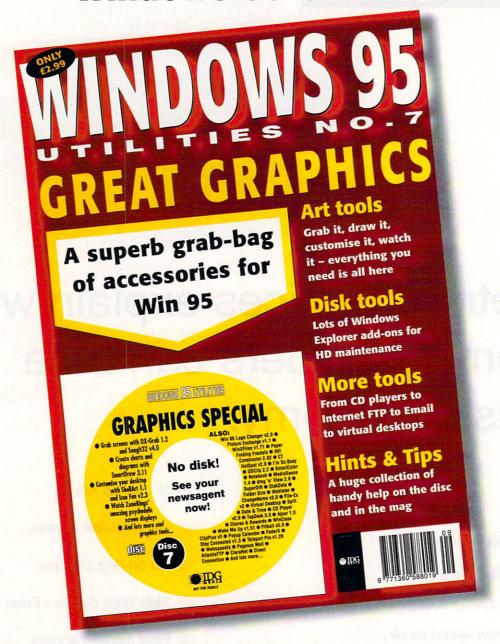


- 1 No set-up fee
- ② UK local call access
- 3 No on-line charges
- 4 5Mb Web Space Free
- S Fast modem access (Standard service supports 33.6kbps)
- 6 Free technical support
- 7 Free software

£90.00 annual subscription or £8.50 per month (INC VAT)

Windows 95 Utilities

If you use Windows '95 then you need "Windows 95 Utilities"!



Whether you use your PC for work, for leisure or as a hobby, Windows 95 Utilities is packed with everything you could possibly need. Each issue features the very best programs for tuning Windows for speed and adding functionality. The programs are categorised and sorted for ease of access and use into Disk, Graphics, Internet, Music, Miscellaneous and Hints and Tips sections.

- Configure Windows 95 to run faster and better
- Add functionality that Microsoft left out
- Upgrade old software to the latest versions
- Everything you need on each Coverdisk
- Each issue is packed with help, hints and tips

NO Dos, NO Win 3.1, NO games – just cool tools for Windows 95! Issue 7 on sale NOW – Issue No 8 on sale 11th Sept

ome in, number nine, your time is up. Since this is the last ever Public Sector, in addition to a handful of the latest and greatest releases, I've decided to share with you not only a selection of the most indispensable PD and shareware utilities ever, but also a collection of my thoughts on the future of our beloved machine. A fond farewell to all, and, as Dave Allen used to say, may your God go with you

last of the Set of the

And in the end, the love you take is equal to the love you

made. **Dave Cusick** takes his final stroll down Shareware Street, and sits thoughtfully contemplating life after AC on a memorial bench in PeeDee Park

S TAR BOY

Programmed by: Fire Fly Productions
Available from: Saddletramps PD
Disk No: G77

Although it owes more than a little to the classic platformer, James Pond II: Robocod, Starboy is probably the best game of its kind to appear on the Amiga for several years, even if full commercial releases are taken into account. Available as a full licenceware release but with a PD demonstration version also obtainable for just 80p plus postage, Starboy is a colourful, entertaining and absorbing platform romp. I've only seen the 11 level demo, but it's enough to convince me that purchasing the full game would be a worthwhile investment.

The appealing main sprite has an array of moves at his disposal. As well

as leaping from one platform to another to progress through the levels, Starboy can throw stars at the baddies that block his way, press switches to lock or unlock doors and even swing from ropes so as to get across chasms.

In an effort to inject added longevity into what might be considered a fairly passé genre, in addition to the standard platform-based levels there are a smattering of graphically pleasing, horizontally scrolling, blasting stages too.

With glorious parallaxing visuals, decent sound effects and a bouncy title tune, the presentation of Starboy is impossible to fault. It's also chockfull of small puzzles, helping add a



Dynablaster: This is how all computer games should be made

genuinely addictive edge. The full version of the game includes 55 levels of action, with five different graphical themes, and is available for £3.99 plus 50p postage.



Starboy offers some truly addictive gameplay...



...even if it is an unashamed clone of Robocod

OF SPICE

Produced by: Kinky Available from: SaddleTramps PD Disk No: D38 A&B

They've taken on the establishmint, and doubtless shocked many old Sage pensioners. They wear revealing cloves in which more sweet and innocent girls would feel a mite chilli. In the short thyme that they've been around, they've already broken a host of chart records and changed the chives of many pre-pubescent girls. They seem to becumin more popular by the day. This autumn you may find that a lads' Friday night out no longer consists of a coriander few beers: instead



they will be nipping down the local cinnamon to see Spice Girls: The Movie.

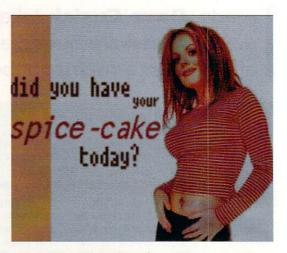
In a few years, the Spice Girls will have been and tarra-gon, and much like

> this column they'll be nothing more than a dim memory in the minds of the masses... then we can all be chervil. In fact, I do confess that I marreviewing ior-am these disks parsley because there was orega-no way I could miss the opportunity to pack as many poor spice puns as I could think of into one of my final Public Sector reviews. I just couldn't keep the temptation at bay. I do apologise; I shall end your saffron now, dear

Out Of Spice is an AGA-only demo featuring a fairly tuneful sample of

reader.

the famous five, a few slightly grainy scanned pictures of selected Spices, and the usual smattering of moderately impressive visual effects. It does not last for a particularly long time but, unlike the vast majority of demos, you might actually want to dig it out of your diskbox more than once to show people. Or then again, you might not.



HRISTMAS CARD MAKER

Produced by: Classic Amiga Software Available from: Classic Amiga Software Disk No: PA118

I realise it's a little early to be thinking about the season of good will, but AC won't be around when December comes and, as Lord Baden-Powell was keen to emphasise to young boys everywhere, it pays to be prepared.

Christmas Card Maker is an example of an extremely good idea which should inspire creative types to produce some genuinely impressive results. It is a collection of small Christmassy images and verses which can be pasted onto a supplied master page using any decent paint package. The image can then be printed out to make an extremely cheap but nevertheless reasonably good-looking Christmas card.



...it's the season of love and understanding; Merry Christmas everyone



Snow is falling all around me, children playing having fun...

There are five verses, several "Merry Christmas" messages and a dozen or so snowy scenes, which can be combined very easily in DPaint, Personal Paint or any one of a wealth of other packages.

A potential problem with the bitmapped image-based approach Christmas Card Maker takes is that such graphics can, unless created at an extremely high resolution, tend to look jagged or blocky when output. Although the snowy scenes provided are all only around 320x256 pixels and have to be output at a size of around 115x70mm, the finished cards don't actually look too bad. The results obviously aren't going to be on a par with commercially available cards, but they look a whole lot better than Blue Peter-esque handmade efforts.

As I have already suggested though,

the most important quality of Christmas Card Maker may actually be that it will inspire many Amiga users to have a go at designing their own cards - even if they do so using graphics from elsewhere, or a DTP program as an alternative to an art package so as to obtain higher quality text output. As such, this represents another in a long line of simple but sensible disks compiled by Classic Amiga Software, and although some of the images and verses supplied are a little disappointing, there should be enough here to really get your creative juices flowing.



And here's the finished product. Impressive, most impressive

E AYOH

Programmed by: NC Gamez Available from: Classic Amiga Software Disk No: G528

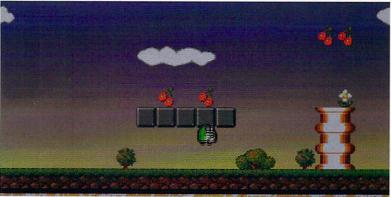
This is a cutesy platformer in the mould of the massively successful Mario series available for the Nintendo consoles. Fayoh is still under development, and so this disk only contains a 5-level demonstration version of the game.

The titular hero Fayoh is in actual fact a green fruit gum, who has lost his heart to a "pink 'n'cute" female fruit gum. Unfortunately, he's lost her too, and so he must traverse a colourful platform landscape to find her once more.

The graphics are extremely bright and attractive. In addition to the pleasant gradiated backdrop there is even a simple parallax scrolling effect, making the game especially pleasing visually. The music is suitably cute and inoffensive, although I doubt that you will find yourself whistling it in the shower.

I feel that I ought to be extremely fond of Fayoh, but I have a couple of reservations about wholeheartedly recommending it. Firstly, perhaps owing to the fact that Fayoh was written in Blitz Basic rather than in C or Assembly language, on a standard A1200 the action

is a tad pedestrian, although on faster machines things become slightly more frantic. Secondly, the game crashed a couple of times during testing (although admittedly this only seemed to happen when the program was started from the Workbench, and not when I booted from the Fayoh disk). Still, Fayoh has not yet been completed, so perhaps the bugs will have been ironed out of the finished version. The full game is set to include 28 levels and various different graphical styles, and will be available to those contributing a shareware fee of between £6 and £10.



Fayoh offers cutesy platform fun for all...



...although it's not yet complete, so there are only five levels to explore

THE DLP COLLECTION

Programmed by: David L Papworth Available from: Classic Amiga Software Disk No: G527

This is a collection of David Papworth's gaming creations of the last few years.

Mad Bomberman is a fairly simplistic game but will nevertheless provide a few minutes of entertainment. At the top of the screen the eponymous bomberman peers over a wall and drops a series of bombs which you must collect in a blue container. If any bombs get past you, you lose a life. If you manage to collect them all, then he drops another series of bombs, except this time they'll fall faster and there will be more of them. It is not the most intellectually demanding of games, but I've certainly seen worse.

Obliteration is a Pang clone. You take control of a Turrican-like sprite packing a directable firearm, and you must destroy several asteroids bouncing around the screen. Larger asteroids split into smaller ones when hit, so if you are not careful you can end up with a large number of rocks hurtling around the screen. Unsurprisingly, if your warrior is hit by an asteroid then he will lose a life.

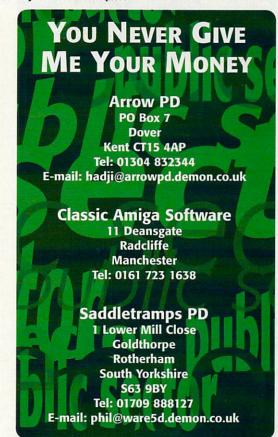
Atom Smasher is a cracking maze

game which reminds me of an old Acorn Electron game called Pengi. You (and a friend, if you've got one) take control of a little robot chappy wandering around screen after screen populated by meanies which can only be destroyed by pushing blocks into them. With beautifully smooth graphics and an impressive turn of speed, this is hugely enjoyable, frantic fun, especially when played in the cooperative two-player mode.

Super Obliteration (originally reviewed in issue 81) is, unsurprisingly, an enhanced version of David's earlier effort. It is not radically different from the original, but the graphics seem a little tidier and there are a host of new levels to try.

In addition to Vector Battle Ground, a reasonable enough tank game, there is also a demonstration version of David's Licenceware classic, Outfall. This is a clone of the Megadrive gem Mean Bean Machine, and it is undoubtedly one of the greatest two player games available for the Amiga.

If you don't already have Atom Smasher, Super Obliteration or Outfall, this disk represents an essential purchase. Catering for a wide variety of gaming styles, it comes highly recommended.



COME TOGETHER

Every month for around a decade, Public Sector has tried to bring you the very best in PD and Shareware. Over the 39 issues in which I've been in charge of the column, there has been a constant stream of submissions both from Public Domain libraries and from individuals, and I'd like to thank you all for your support. As Neil joked to me the other week, there have been times in recent months when it has seemed like this column has contained the only new software arriving in the AC office. Writing the last ever Public Sector has been quite a sad experience; I would like to think that this column, into which I've poured more of myself than anything else I've written for a magazine, has provided some amusement over the years as well as helpful information and opinions.

Although we all hoped this day would never come, for a while now it has seemed some-thing of an inevitability. The good ship Amiga Computing has sailed its final voyage; the crew must toddle off to pastures new and those who enjoyed the precious bounty it bore must now find an alternative purveyor of provisions. So what will you do now, dear reader? Will you abandon the Amiga altogether, convinced that the end of AC marks the final nail in a coffin within which our beloved machine has been languishing for some time? I would hope not; and if you are to follow the flock and purchase a PC, then I would at least suggest that you keep hold of your Amiga... just in case. At least then you'll be able to return if the possible Power Amiga revolution materialises, and even if it doesn't, you'll find the PC is not a beast which is easily tamed.

That said, I strongly suspect that, if you've stuck with the Amiga this long, you will be willing to carry on the fight after our departure. It could be that you will turn to one of AC's competitors... whilst this is not the first Amiga magazine to wave a fond farewell, it isn't the last either, and there are others still flying the flag. (One of them is now home to erstwhile AC editor Ben Vost, and indeed yours truly will continue to churn out PD and Internet pages for that publication for as long as he can).

On the other hand, you might decide to follow a large number of dedicated Amigans onto the Internet. There are so many excellent Amiga resources on the Net now that you should always be able to keep up to date with the latest developments in the software and hardware markets (and my Public Sector webpages at http://www.dcus.demon.co.uk/ will remain in place for the forseeable future). With any luck, at least some of these sites will be championing the Amiga long after this humble column has become but a distant memory in the minds of computer users everywhere.

I WANT YOU (SHE'S SO HEAVY)

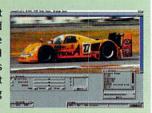
I know it's a tad corny, but I couldn't resist the temptation to award some sort of Public Sector awards to the best pieces of software to have been reviewed in these pages. In issue 114 I ran through the best in PD and shareware games, so here, for your deliberation, cogitation and digestion, are a handful of "serious" programs no Amiga owner should be without. If you don't already have them, ring up your favourite PD library and order them now.

MAGIC USER INTERFACE

I've currently got v3.8 installed, although by the time you read this that could easily be out of date. This is without doubt one of the greatest pieces of software ever written for the Amiga. As means of providing programmers with extremely easy-to-produce interface routines and providing users with a highly configurable, not to mention extremely attractive, front-end, MUI is simply in a league of its own. Some will say that ClassAct uses less memory, or BGUI is more compact. To those people I say that several thousand Amiga users and literally hundreds of Amiga programmers simply can't be wrong. Get hold of a copy, register with SASG, and enjoy.

IMAGESTUDIO 2

Everyone needs an image processor, and they don't come a lot better than ImageStudio 2. Programmed by Graham and Andy Dean, whose latest masterpiece DrawStudio is available commercially through LH Publishing, this is the definitive shareware graphics package. It can read and write every image format you'll ever need to deal with, and it boasts a stunning arsenal of effects too.



MASTER CONTROL PROGRAM

The commodity that does everything, MCP is an absolute essential for any self-respecting Workbench user. It demands a fair bit of memory, a fact which has led some to use MultiCX instead; but that is an inferior program in terms of features and, let's face it, most Amiga owners these days own powerful enough machines to run MCP on.

BROWSER II v3.09

If you can't afford Dopus Magellan then, at least until Workbench 4, WorkbenchNG or a similar replacement Workbench appears, this is probably the single most dramatic change you could make to your daily file-handling. It won't be to everyone's taste, but it is userfriendly, highly configurable and has the potential to radically increase your productivity.



NEWICONS 3

Not everyone fancies Magic Workbench, particularly if they have a fancy graphics card which is capable of running Workbench in a plethora of colours. Newlcons 3 offers a rather more bright colourscheme, and although icons will look completely stupid on non-patched systems (they'll appear as a tiny blob), on suitably configured systems they look extremely attractive. They're a tad slow on lesser Amigas however. Newlcons 3 won't be for everyone; but it's one of those programs that if you don't hate, you'll love.

TOOLMANAGER 2

There's a newer version, but if anything the new user interface overcomplicates what was already an immensely powerful, if slightly illogically designed, user interface enhancement. You can add items to the Workbench Tools menu and you can configure icon docks, with the end result being a far more sophisticated Workbench in which all the most powerful applications are available within a couple of clicks.

UK Customers call 01709 888127



US Customers call 1-800-426-7687

EE Catalogue

5D Software (AC) 1 Lower Mill Close Goldthorpe, Rotherham S63 9BY Amiga 5D & F1 Licenceware Amiga & PC Public Domain Amiga & PC CD-Roms

Sagittarius Software (AC) 1706 Canton Road Akron, OH 44312 USA **Amos Compiler** Amiga 5D Licenceware **Vulcan Software**

Call your local dealer for details of our superb Amiga range. Games, Utilities and Educational programs starting from just £3.95/\$6.50. To claim your free catalogue disk just call the UK number shown above and quote AC3 or send two first class postage stamps to 5D Software. Most of the products have PD demo disks, so you can try them out first.

Vebsites http://www.ware5d.demon.co.uk







CARE QUALITY & SERVICE

QUALITY INK JET & BUBBLE JET REFILLS

Our refills use only top quality inks. You buy direct from us hence our superb quality at sensible pric Black refills for HP Deskjet 500, 510, 550, 500C, 550C, 560C, 660C, 850C CANON BC-01, B110E/EX/SX, BC-02, B1200, B1130, B1300, B1330

EPSON STYLUS 800, 1000. CITIZEN PROJET. OLIVETTI JP150, 250, 350, 6 refill (3 on high capacity cartridges) kit 120ml pure black. £16.99

CANON BJC 210, 600, 4000 Ranges up to 20 refills pure black. £16.99

EPSON STYLUS/Colour/II/IIs/500 120ml pure black. £16.99

TRICOLOUR REFILL KITS:

HP Deskjet range 10 refills of Yellow, Magenta & Cyan 180ml £24.99
CANON BJC210, BJC600, 4000/4100 10 refills of Yellow, Magenta & Cyan 180ml £24.99
EPSON STYLUS Colour/II/IIs/500 Yellow, Magenta & Cyan 60ml each £24.99
"Print Head Recovery Fluid" for unblocking nozzles, new larger size, new lower price £6.99
all kits come with full instructions. Other refills available. Important: Please state type when ordering

Colour Printer Ribbons & Reloads

To Reload a ribbon is easy, just remove the top, take out the old ribbon and reload it with a new one. Complete One Five ribbon reload reloads Citizen Swift/ABC/240 etc. £11.95 £6.99 £29.95 Panasonic KXP2123/2124/2180 Panasonic KXP2135 Star LC200 9 pin Star LC24-10/20/200 Star LC24-30/LC240 £9.99 £6.99 £9.99 £5.99 £29.95 £29.95 £29.95 £9.99 £9.99 £9.99 £6.99 £29.95 £8.99 £4.95 £19.99 Seikosha SL95 £14.95 £6.99 £29.95

Special Re-Ink

For Panasonic 1080/81, 1123/24, 2123/80, 2135, Star LC200 9 Pin, Epson LQ100/150, Oki 182 to 390 range. Black bottle will re-ink 100 + ribbons £9 95

Black Printer Ribbon Reloads

Citizen Swift/ABC/120D 5 black reloads.. £9.99 Star LC10/20/100 5 black reloads............ £4.99 Star LC24 range 5 black reloads.....£9.99 Seikosha 1900/2400/SL95 5 black reloads £9.99 Epson FX80 to LQ800 range 5 black reloads£11.99 Star LC24-30/LC240 5 black reloads£14.99

T-shirt printing is simple, just print onto normal paper & iron on. One ribbon gives lots of prints. We can also supply ribbons in many colours T-shirt and normal ink

T-Shirt printing ribbons

4 col Citizen Swift/ABC/240....£19.99 4 col Panasonic 2123/2135.....£19.99 4 colour Star LC200 24 Pin.....£19.99 reloads for above £9.99

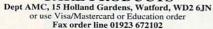
4 colour Star LC200 9 Pin£12.99 4 colour Star LC10£10.99 reloads for above £7.99 Black Citizen Swift/ABC/120D £9.99 Black Star LC10£9.99
Black Star LC200 9pin£9.99

Black Panasonic KXP1080/81 ...£9.99

Black Panasonic KXP1123/24 ...£9.99

Prices include VAT & postage. To order send cheques/PO payable to:

CARE PRODUCTS





Tel ORDER LINE 01923 894064

COMP		
1st Computer Centre16	6 Kew = II	28
Active Software3	Mediasoft	20
Care Electronics43	Moore Healey Marketing	
Chroma28	Pathfinder Pd	
Classic Amiga28	S & S Computers	
Computer Systems & Services28	Saddletramn DD	43
Gasteiner13 Golden Image7	Special Reserve	28
Guidhall Leisure24		43
HarwoodsIFC, 3		23
Hi-SoftIBC, OBC		33
CPUG28	Zetnet	37

FREE FREE

GAMES CHEATS 1.4 EMULATOR UNDERGROUND LIBRARY DISK



FREE

PLATFORM GAMES			
	TETRIS - COLUMNS	AMIGA LEISURE	AMIGA EMULATION
a 1330 CAPTAIN BONUS	a 294 KLACK-TRIS COLMS	a 205 AMIGA PUNTER	a 423 2 DISK SPECTRUM
a 1233 ROACH MOTEL	a 107 TWIN-TRIS TETRIS	a 228 PERM CHECKER	a 889 PC EM 2 DISK
a 1445 10 C.W. GAMES	a 293 DR-MARIO COLMS	a 1210 LOTTO LUNATIC	
a 1553 LANCE-O-LOT			
a 1462 CHARLIE COOL		a 1438 A-GENE V5	a 955 DOWN TO A500
a 1701 ITS HIDEOUS	a 1627 PILL-MANIA	a 1594 LOTTERY SYSTEM	a 313 UP TO A500 PLUS
a 1684 THE BIRDIES	a 1919 VANILLA TETRIS	a 1682 THE PHYSICIAN	a 414 UP TO A1200
	a 1954 A1200 PLUBZ	a 1982 DYNAMIC SKIES	a 1977 RELO-KICK 1.41
a 1878 JUMPMAN DELUXE	a 2000 A12 WORM-TRIS	A1200 MEGADEMOS	DISK COPIERS
a 2003 A12 BANANA IS	PAC-MAN GAMES	a 1270 DOOM RAVE	a 727 MULTI TASK (MT)
a 911 SOLO ASSAULT	a 1096 PUC-MAN	a 1165 VENTILATOR	a 158 X.COPY PRO
a 911 SOLO ASSAULT		a 1414 2 DISK DOVE	
a 906 OBLITERATOR	a 1138 A12 CYBER MAN	a 1415 MYSTIC ILEX	a 357 COPY AND CRACK
a 498 THE LAST REFUGE	a 1346 WABES PAC MAN		a 325 LOCKPICKER V2
a 1434 SPACE BLASTER	a 1648 A12 BOBS LEMON	a 1725 DREAM WITH ME	a 1667 COPY & CRACK V2
a 1789 MEGA TYPHOON	a 230 SUPER PAC MAN	a 1783 FATAL MORGANA	a 1896 COPY & CRACK V3
	a 1931 A12 PLAY PAC	a 1939 ATMOS-FEAR	HARD DRIVES
a 1855 A12 SPEEDBREAK	a 1956 JACK-MAN	a 1934 A12 2DSK LIARS	a 779 W/B 3 INSTALL
a 1885 BLASTED	BREAK-OUT & PONG	a 2002 POKE THE EYE!	
a 1904 CREEPY CRAWLIE		AMIGA MEGADEMOS	a 780 W/B 2 INSTALL
a 1921 WITNESS	a 003 MEGABALL V1	a 460 TEKNO RAVE	a 490 8 DISK MAGIC W/B
a 1935 SPACE ESCAPE	a 459 MEGABALL V2	a 1015 2DSK TAZ QUEEN	a 1692 A BACKUP V5
a 1942 GALAXY BLITZ	a 1459 CYBERSPHERE	a 1120 2DSK TAZ-QUEEN 2	a 1674 CD ATAPI
ARCADE GAMES	a 559 MEGABALL V3		a 1775 2 DISK MUI 3.6
a 273 KELLOGS EXPRESS	a 1704 BORIS BALL	a 1104 2DSK OXYGENE	a 1770 2 DSK ERROR TALK
a 1368 ALIENS F.F.	a 1853 DOUBLE BATTLE	a 1084 ASCII NOT 1.3	a 1966 GAME INSTALLL V9
		a 1785 TECHNO TRACKS	
a 1338 STRIKE COMMAND	a 1924 OUTSIDE BREAK	a 1816 BATMAN 2 DISK	a 1967GAME INSTALL V10
a 1500 U.P.D. 24 GAMES	BOULDERDASH GAMES	a 1985 COLOUR CYCLE	PRINTING
a 1880 A12 SLIPSTREAM	a 1527 ICE MINE PRO	A1200 SLIDE SHOWS	a 243 AWARD MAKER 4DSK
a 1908 A12 FLY TIGERS	a 1595 NEW MINES	a 740 4 DISK MANGA	a 065 AMIGA FONT 7 DISK
a 1944 POSIDEN	a 1569 BUG MINES		a 100 PRINTER DRIVERS
a 1948 ANTS	a 1572 UNDER MINES	a 1271 PIXEL STORMS	a 048 PRINTING STUDIO
a 1998 SUN - NOT 1.3		a 1193 LEMMINGTONS	
a 2008 A1200 KICK IT		a 1646 MISS MANGA	a 345 BANNER MAKER
	a 1577 EMERALD HEAD	a 1650 STARFLEET 3DSK	a 057 TEXT ENGINE V4
P.D. VERSIONS a 025 HUNTER PLUS	a 1580 EXPERT MINES	AMIGA SLIDE SHOWS	a 394 INVOICE PRINT
	a 1582 DENMARK MINES	a 704 REVELATIONS	a 749 FORM PRINTER
a 815 LEMMINGS PACK	a 1583 STYX MINES	a 061 PAT NAGEL'S GIRLS	a 1658 CARD AND LABEL
a 023 RICK DANGEROUS	a 1892 SPACE MINES	a 936 AVIATION HISTORY	a 1842 PRINTMASTER
a 1457 TI-FIGHTER	a 2013 WONDER MINES		a 2012 FONT EDITOR
a 022 THE GODS	PUB-CLUB GAMES		AMIGA BUSINESS
a 026 ROBOCOP V2	PUB-CLUB GAIVIES	a 1472 YABA DABA DO	
a 1702 S.W.O.S. MOON	a 1304 CHECKERS V2	ARTWORK PACKAGE	a 832 DATABASES 2 DISK
a 1778 PINBALL FANTASY	a 222 FRUIT MACHINE	a 063 ULTRAPAINT	a 092 ACCOUNT MASTER
	a 375 CARDS SOLITAIRE	a 349 SPECTRA COLOUR	a 470 LITTLE OFFICE
COMBAT GAMES	a 1246 AMIGA CRIBBAGE	a 748 ILLUSION PAINT	a 244 SPREADSHEET
a 941 FATAL BLOWS	a 1362 PUB DARTS TOUR	a 1460 A-Z PAINT PAD	a 535 UK S.T.D. CODES
a 938 MARTIAL SPIRIT	a 560 WORLD DARTS	a 1565 CARTOON STUDIO	a 1464 DIARY 2000
a 290 FIGHT WARRIORS			
a 1238 WEAPON MASTER		a 1707 PERFECT PAINT	a 1368 AMIBASE V4
a 1428 CYBERGAMES 3DSK	a 1112 A1200 X CARDS	a 1760 JNR PICASSO	a 1758 DAILY LIVING
a 1548 FIGHT A1200	a 1930 A12 DOMINOES	a 1932 DOODLE NOT 1.3	a 1976 NOTE-BOOK
a 1720 A1200 SAMURI	a 1929 A1200 YATZEE	ARTWORK PROGRAMS	COLOUR CLIP ART
CLASSIC GAMES	BOARD GAMES	a 1299 A12 MAGNI-CAD	a 637 6 DISK COL/BRUSH
a 011 ASTEROIDS	a 910 NEW MONOPOLY STAT	a 071 GRAPHICS CON KIT	a 633 7 DISK CLIP ART
a 693 MISSILE COMMAND	a 631 SCRABBLE	a 070 GRAPHIC UTILS	a 901 9 DISK WORLD MAP
a 778 OVERLANDER	a 476 CHESS GAMES	a 133 FRAC LAND BUILD	MONO CLIP ART
a 692 SPACE INVADERS	a 1433 LIFTS & LADDERS	a 1026 PICTURE LAB	a 172 15 DISK PORTFOLIO
a 841 COOKIE	ADVENTURE GAMES	ANIMATIONS	
a 308 DONKEY KONG	a 116 STAR TREK 2 DISK	a 084 PUGGS IN SPACE	
	DATE LIFERENCE CONTRACTOR TO THE CONTRACTOR	a 651 FAIRLIGHT 242	AMIGA MODEM
DRIVING GAMES		a 831 RED DWARF	a 702 COMMS TUTORIAL
a 951 FLAMING ENGINES	a 1671 BREED 1996	a 475 BAIT MASKING	a 413 N. COMMS V3
a 1469 THE ROAD TO HELL	a 1753 A1200 GLOOM	a 347 NEWTEK V3 2 DISK	a 079 OPTICOMMS V2
a 1417 MANG FENDERS V2	a 1894 TIME RUNNER V2		
a 1466 A12 KNOCK OUT		a 187 ANIMATION STUDIO	a 1032 MAX BBS PROG
	a 1925 DUNGEONS	a 187 ANIMATION STUDIO	a 1032 MAX BBS PROG PROGRAMMERS
a 1642 A1200 EX RACING		AMIGA VIDEO	PROGRAMMERS
a 1642 A1200 EX RACING a 1705 A12 AER RACERS	STRATEGY GAMES	a 329 VIDEO INSCRIPT	PROGRAMMERS a 288 A-BASIC TUTOR
a 1642 A1200 EX RACING a 1705 A12 AER RACERS	a 876 GLOBAL NUKE WAR	a 329 VIDEO INSCRIPT a 790 VIDEOTRACKER 5 DISK	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR	a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE	AMIGA VIDEO a 329 VIDEO INSCRIPT a 790 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDITOR 96/7	a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1182 A12 NIGHTMARE	AMIGA VIDEO a 329 VIDEO INSCRIPT a 790 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDITOR 96/7 SIMULATORS	a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1182 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK	AMIGA VIDEO a 329 VIDEO INSCRIPT a 790 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDITOR 96/7 SIMULATORS a 332 SEALANCE-SUB	a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1182 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED	AMIGA VIDEO a 329 VIDEO INSCRIPT a 790 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 431 RAVE KEYBOARDS	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU
a 1642 A1200 EX RACING 1705 A12 AER RACERS a 1893 BOSSCAR 074 F1 EDITOR 96/7 SIMULATORS a 332 SEALANCE-SUB a 333 BATTLE CARS V2	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1182 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLO STAR-TREK	AMIGA VIDEO a 329 VIDEO INSCRIPT a 790 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF
a 142 A1200 EX RACING a 1893 BOSSCAR a 1893 BOSSCAR a 074 F1 EDITOR 96/7 SIMULATORS a 332 SEALANCE-SUB a 333 BATTLE CARS V2 a 926 HELICOPTER	a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1182 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED	AMIGA VIDEO a 329 VIDEO INSCRIPT a 790 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 431 RAVE KEYBOARDS	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDITOR 967 SIMULATORS a 332 SEALANCE-SUB a 333 BATTLE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1182 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLO STAR-TREK	AMIGA VIDEO a 329 VIDEO INSCRIPT a 790 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 431 RAVE KEYBOARDS a 202 MED V3.2 a 729 DRUM MACHINE	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SLIDESHOW MAKER
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDITOR 967 SIMULATORS a 332 SEALANCE-SUB a 333 BATTLE CARS V2 a 926 HELICOPTER a 173 A12 TRAIN DRIVER SPORTS GAMES	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1182 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLO STAR-TREK PUZZLER GAMES a 953 CHANEQUE 2 DISK	AMIGA VIDEO a 329 VIDEO INSCRIPT a 790 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 431 RAVE KEYBOARDS a 202 MED V3.2 a 729 DRUM MACHINE a 787 SONIC DRUM KIT	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SLIDESHOW MAKER a 808 MAKE A DISK
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDITOR 9607 SIMULATORS a 332 SEALANCE-SUB a 333 BATTLE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER SPORTS GAMES a 1014 CRAZY GOLF	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1182 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLO STAR-TREK PUZZLER GAMES a 859 10 PUZZLERS a 859 10 PUZZLERS a 859 10 PUZZLERS	AMIGA VIDEO a 329 VIDEO INSCRIPT a 790 VIDEOTRACKER 5 DISK a 1485 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 431 RAVE KEYBOARDS a 202 MED V3.2 a 729 DRUM MACHINE a 787 SONIC DRUM KIT a 738 OCTAMED V2	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SUDESHOW MAKER a 808 MAKE A DISK a 242 WENU MAKER
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDITOR 96/7 SIMULATORS a 332 SALIANCE-SUB a 333 BATILE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER SPORTS GAMES a 101 ACRAY SOLI a 530 TEN PIN BOWLING	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1182 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLO STAR-TREK PUZZLER GAMES a 953 CHANEQUE 2 DISK a 859 10 PUZZLERS a 1550 PUZZLER PITS	AMIGA VIDEO a 329 VIDEO INSCRIPT a 790 VIDEOTRACKER 5 DISK a 1485 - MOOVIE WUSSIC MAKERS a 220 FUNK KEYBOARDS a 202 FUNK KEYBOARDS a 202 MED V32 a 729 DRUM MACHINE a 787 SONIC DRUM KIT a 788 OCTAMED V2 a 136 THE ART OF MED	PROGRAMMERS a 288 A SASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1057 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SUDESHOW MAKER a 808 MAKE A DISK a 242 MENU MAKER a 1154 HEDLEY GUIDE A12
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDTOR 96/7 SIMULATORS a 332 SEALANCE-SUB a 332 SEALANCE-SUB a 233 BATTLE CARS V2 a 1273 A12 TRAIN DRIVER 2 1273 A12 TRAIN DRIVER SPORTS GAMES a 1014 CRAZY GOLF a 530 TEN PIN BOWLING a 1717 LD SKC RS-ANGLER a 1717 LD SKC RS-ANGLER	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1132 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLD STAR-TIREK PUZZIER GAMES a 953 CHARDOUE 2 DISK a 859 10 PUZZIERS a 1550 PUZZIE PTS a 1556 EXPERT BALLS	AMIGA VIDEO a 329 VIDEO INSCRIPT a 790 VIDEOTRACKER 5 DISK a 1485 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 202 MED V3.2 a 729 DRUM MACHINE a 787 SONIC DRUM KIT a 738 OCTAMED V2 a 192 THE COMPOSER	PROGRAMMERS a 288 A-BASIC TUTOR a 306 INDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SLIDESHOW MAKER a 808 MAKE A DISK a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1993 MAKE A DISK V2
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDITOR 96/7 SIMULATORS a 332 SALIANCE-SUB a 333 BATILE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER SPORTS GAMES a 101 ACRAY SOLI a 530 TEN PIN BOWLING	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1182 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLO STAR-TREK PUZZLER GAMES a 953 CHANEQUE 2 DISK a 1550 PUZZLE PITS a 1546 EXPERT BALLS a 1633 THE WOOGLIES	AMIGA VIDEO a 329 VIDEO INSCRIPT a 790 VIDEOTRACKER 5 DISK a 1485 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 202 MED V3.2 a 729 DRUM MACHINE a 787 SONIC DRUM KIT a 738 OCTAMED V2 a 192 THE COMPOSER	PROGRAMMERS a 288 A SASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1057 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 289 SIDESHOW MAKER a 808 MAKE A DISK a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK V VIRUS CONTROL
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDITOR 96/7 SIMULATORS a 332 SALLANCE-SUB a 333 BATLE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER SPORTS GAMES a 1014 CRAZY GOLF a 630 TEN PIN BOWLING a 1171 2 DSK CRS-ANGLER a 1373 ICE HOCKEY	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1122 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLO STAR-TREK PUZZLER GAMES a 953 CHANEQUE 2 DISK a 8593 10 PUZZLER i 1556 SUZZLE PITS a 1556 EXPERT BALLS a 1636 THE WOOGLIES a 1637 THE WOOGLIES	AMIGA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 201 FUNK KEYBOARDS a 202 MED V3.2 729 DRUM MACHINE a 788 TORMED V3. a 138 THE ART OF MED a 192 THE COMPOSER a 192 THE COMPOSER a 188 MUSIC DATABASE	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SUDESHOW MAKER a 808 MAKE A DISK a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK VIRUS CONTROL
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDITOR 96/7 SIMULATORS a 332 SALLANCE-SUB a 333 BATLE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER SPORTS GAMES a 1014 CRAZY GOLF a 630 TEN PIN BOWLING a 1171 2 DSK CRS-ANGLER a 1373 ICE HOCKEY	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1122 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLO STAR-TREK PUZZLER GAMES a 953 CHANEQUE 2 DISK a 8593 10 PUZZLER i 1556 SUZZLE PITS a 1556 EXPERT BALLS a 1636 THE WOOGLIES a 1637 THE WOOGLIES	AMIGA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 201 FUNK KEYBOARDS a 202 MED V3.2 729 DRUM MACHINE a 788 TORMED V3. a 138 THE ART OF MED a 192 THE COMPOSER a 192 THE COMPOSER a 188 MUSIC DATABASE	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SUDESHOW MAKER a 808 MAKE A DISK a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK VIRUS CONTROL
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDITOR 96/7 SIMULATORS a 332 SALLANCE-SUB a 333 BATLE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER SPORTS GAMES a 1014 CRAZY GOLF a 630 TEN PIN BOWLING a 1171 2 DSK CRS-ANGLER a 1373 ICE HOCKEY	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1122 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLO STAR-TREK PUZZLER GAMES a 953 CHANEQUE 2 DISK a 8593 10 PUZZLER i 1556 SUZZLE PITS a 1556 EXPERT BALLS a 1636 THE WOOGLIES a 1637 THE WOOGLIES	AMIGA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 201 FUNK KEYBOARDS a 202 MED V3.2 729 DRUM MACHINE a 788 TORMED V3. a 138 THE ART OF MED a 192 THE COMPOSER a 192 THE COMPOSER a 188 MUSIC DATABASE	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SUDESHOW MAKER a 808 MAKE A DISK a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK VIRUS CONTROL
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDITOR 96/7 SIMULATORS a 332 SALLANCE-SUB a 333 BATLE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER SPORTS GAMES a 1014 CRAZY GOLF a 630 TEN PIN BOWLING a 1171 2 DSK CRS-ANGLER a 1373 ICE HOCKEY	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1122 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLO STAR-TREK PUZZLER GAMES a 953 CHANEQUE 2 DISK a 8593 10 PUZZLER i 1556 SUZZLE PITS a 1556 EXPERT BALLS a 1636 THE WOOGLIES a 1637 THE WOOGLIES	AMIGA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 201 FUNK KEYBOARDS a 202 MED V3.2 729 DRUM MACHINE a 788 TORMED V3. a 138 THE ART OF MED a 192 THE COMPOSER a 192 THE COMPOSER a 188 MUSIC DATABASE	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SUDESHOW MAKER a 808 MAKE A DISK a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK VIRUS CONTROL
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDITOR 96/7 SIMULATORS a 332 SALLANCE-SUB a 333 BATLE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER SPORTS GAMES a 1014 CRAZY GOLF a 630 TEN PIN BOWLING a 1171 2 DSK CRS-ANGLER a 1373 ICE HOCKEY	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1122 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLO STAR-TREK PUZZLER GAMES a 953 CHANEQUE 2 DISK a 8593 10 PUZZLER i 1556 SUZZLE PITS a 1556 EXPERT BALLS a 1636 THE WOOGLIES a 1637 THE WOOGLIES	AMIGA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 201 FUNK KEYBOARDS a 202 MED V3.2 729 DRUM MACHINE a 788 TORMED V3. a 138 THE ART OF MED a 192 THE COMPOSER a 192 THE COMPOSER a 188 MUSIC DATABASE	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SUDESHOW MAKER a 808 MAKE A DISK a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK VIRUS CONTROL
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDITOR 96/7 SIMULATORS a 332 SALLANCE-SUB a 333 BATLE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER SPORTS GAMES a 1014 CRAZY GOLF a 630 TEN PIN BOWLING a 1171 2 DSK CRS-ANGLER a 1373 ICE HOCKEY	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1122 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLO STAR-TREK PUZZLER GAMES a 953 CHANEQUE 2 DISK a 8593 10 PUZZLER i 1556 SUZZLE PITS a 1556 EXPERT BALLS a 1636 THE WOOGLIES a 1637 THE WOOGLIES	AMIGA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 201 FUNK KEYBOARDS a 202 MED V3.2 729 DRUM MACHINE a 788 TORMED V3. a 138 THE ART OF MED a 192 THE COMPOSER a 192 THE COMPOSER a 188 MUSIC DATABASE	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SUDESHOW MAKER a 808 MAKE A DISK a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK VIRUS CONTROL
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDITOR 96/7 SIMULATORS a 332 SALLANCE-SUB a 333 BATLE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER SPORTS GAMES a 1014 CRAZY GOLF a 630 TEN PIN BOWLING a 1171 2 DSK CRS-ANGLER a 1373 ICE HOCKEY	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1122 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLO STAR-TREK PUZZLER GAMES a 953 CHANEQUE 2 DISK a 8593 10 PUZZLER i 1556 SUZZLE PITS a 1556 EXPERT BALLS a 1636 THE WOOGLIES a 1637 THE WOOGLIES	AMIGA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 201 FUNK KEYBOARDS a 202 MED V3.2 729 DRUM MACHINE a 788 TORMED V3. a 138 THE ART OF MED a 192 THE COMPOSER a 192 THE COMPOSER a 188 MUSIC DATABASE	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SUDESHOW MAKER a 808 MAKE A DISK a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK VIRUS CONTROL
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDITOR 96/7 SIMULATORS a 332 SALLANCE-SUB a 333 BATLE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER SPORTS GAMES a 1014 CRAZY GOLF a 630 TEN PIN BOWLING a 1171 2 DSK CRS-ANGLER a 1373 ICE HOCKEY	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1122 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLO STAR-TREK PUZZLER GAMES a 953 CHANEQUE 2 DISK a 8593 10 PUZZLER i 1556 SUZZLE PITS a 1556 EXPERT BALLS a 1636 THE WOOGLIES a 1637 THE WOOGLIES	AMIGA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 201 FUNK KEYBOARDS a 202 MED V3.2 729 DRUM MACHINE a 788 TORMED V3. a 138 THE ART OF MED a 192 THE COMPOSER a 192 THE COMPOSER a 188 MUSIC DATABASE	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SUDESHOW MAKER a 808 MAKE A DISK a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK VIRUS CONTROL
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDITOR 96/7 SIMULATORS a 332 SALLANCE-SUB a 333 BATLE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER SPORTS GAMES a 1014 CRAZY GOLF a 630 TEN PIN BOWLING a 1171 2 DSK CRS-ANGLER a 1373 ICE HOCKEY	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1122 A12 NIGHTMARE a 1170 A12 LOBDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLO STAR-TREK PUZZLER GAMES a 953 CHANEQUE 2 DISK a 8593 10 PUZZLER i 1556 SUZZLE PITS a 1556 EXPERT BALLS a 1636 THE WOOGLIES a 1637 THE WOOGLIES	AMIGA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 201 FUNK KEYBOARDS a 202 MED V3.2 729 DRUM MACHINE a 788 TORMED V3. a 138 THE ART OF MED a 192 THE COMPOSER a 192 THE COMPOSER a 188 MUSIC DATABASE	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SUDESHOW MAKER a 808 MAKE A DISK a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK VIRUS CONTROL
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDITOR 96/7 SIMULATORS a 332 SALLANCE-SUB a 333 BATLE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER SPORTS GAMES a 1014 CRAZY GOLF a 630 TEN PIN BOWLING a 1171 2 DSK CRS-ANGLER a 1373 ICE HOCKEY	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1122 A12 NIGHTMARE a 1170 A12 LOBDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLO STAR-TREK PUZZLER GAMES a 953 CHANEQUE 2 DISK a 8593 10 PUZZLER i 1556 SUZZLE PITS a 1556 EXPERT BALLS a 1636 THE WOOGLIES a 1637 THE WOOGLIES	AMIGA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 201 FUNK KEYBOARDS a 202 MED V3.2 729 DRUM MACHINE a 788 TORMED V3. a 138 THE ART OF MED a 192 THE COMPOSER a 192 THE COMPOSER a 188 MUSIC DATABASE	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SUDESHOW MAKER a 808 MAKE A DISK a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK VIRUS CONTROL
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDTOR 96/7 SIMULATORS a 332 SEALANCE SUB b 333 SATITE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER SPORTS GAMES a 1014 CRAZY GOLF a 1371 EX DRIVERS a 1717 ED XK GES-ANGLER a 1373 ICE HOCKEY a 1373 ICE HOCKEY a 1373 ICE HOCKEY a 1375 ICE HOCKEY a 1376 COP FISH'N a 1465 A12 2 DISK TEHNIS a 1630 INTER CRICKET a 1700 GOLF 9 HOLES HIVITS & CHEATS a 418 1000 CHEATS a 931 BACKDOOR V3 a 821 PASSWORD MAINA a 813 GAME TAMER V4.5 818 GAME TAMER V4.5	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1182 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SULD STAR-TIRK PUZZLER GAMES a 953 CHANGUE 2 DISK a 859 10 PUZZLER i 1550 PUZZLE PITS a 1560 PUZZLE PITS a 1566 SEARN BALLS a 1633 THE WOOGLIES a 765 SCHARM BALLS a 1646 SEVERT BALLS a 1659 TRATISH LEAGUE a 221 AIRPORT a 443 SLAM BALL a 1699 PREMER PICS a 1699 PREMER PICS a 1699 PREMER PICS a 1751 MIGNOD BALL a 1699 PREMER PICS a 1763 AIR TRAFFIC a 1771 MIGNOD MARTS a 1771 M	AMIGA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 201 FUNK KEYBOARDS a 202 MED V3.2 729 DRUM MACHINE a 788 TORMED V3. a 138 THE ART OF MED a 192 THE COMPOSER a 192 THE COMPOSER a 188 MUSIC DATABASE	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SUDESHOW MAKER a 808 MAKE A DISK a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK VIRUS CONTROL
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDTOR 96/7 SIMULATORS a 332 SEALANCE SUB b 333 SATITE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER SPORTS GAMES a 1014 CRAZY GOLF a 1371 EX DRIVERS a 1717 ED XK GES-ANGLER a 1373 ICE HOCKEY a 1373 ICE HOCKEY a 1373 ICE HOCKEY a 1375 ICE HOCKEY a 1376 COP FISH'N a 1465 A12 2 DISK TEHNIS a 1630 INTER CRICKET a 1700 GOLF 9 HOLES HIVITS & CHEATS a 418 1000 CHEATS a 931 BACKDOOR V3 a 821 PASSWORD MAINA a 813 GAME TAMER V4.5 818 GAME TAMER V4.5	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1182 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SULD STAR-TIRK PUZZLER GAMES a 953 CHANGUE 2 DISK a 859 10 PUZZLER i 1550 PUZZLE PITS a 1560 PUZZLE PITS a 1566 SEARN BALLS a 1633 THE WOOGLIES a 765 SCHARM BALLS a 1646 SEVERT BALLS a 1659 TRATISH LEAGUE a 221 AIRPORT a 443 SLAM BALL a 1699 PREMER PICS a 1699 PREMER PICS a 1699 PREMER PICS a 1751 MIGNOD BALL a 1699 PREMER PICS a 1763 AIR TRAFFIC a 1771 MIGNOD MARTS a 1771 M	AMIGA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 201 FUNK KEYBOARDS a 202 MED V3.2 729 DRUM MACHINE a 788 TORMED V3. a 138 THE ART OF MED a 192 THE COMPOSER a 192 THE COMPOSER a 188 MUSIC DATABASE	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SUDESHOW MAKER a 808 MAKE A DISK a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK VIRUS CONTROL
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDTOR 96/7 SIMULATORS a 332 SEALANCE SUB b 333 SATITE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER SPORTS GAMES a 1014 CRAZY GOLF a 1371 EX DRIVERS a 1717 ED XK GES-ANGLER a 1373 ICE HOCKEY a 1373 ICE HOCKEY a 1373 ICE HOCKEY a 1375 ICE HOCKEY a 1376 COP FISH'N a 1465 A12 2 DISK TEHNIS a 1630 INTER CRICKET a 1700 GOLF 9 HOLES HIVITS & CHEATS a 418 1000 CHEATS a 931 BACKDOOR V3 a 821 PASSWORD MAINA a 813 GAME TAMER V4.5 818 GAME TAMER V4.5	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1182 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SULD STAR-TIRK PUZZLER GAMES a 953 CHANGUE 2 DISK a 893 IP PUZZLER a 1550 PUZZLE PITS a 1550 PUZZLE PITS a 1560 PUZZLE PITS a 1564 EXPERT BALLS a 1633 THE WOOGLIES a 765 SCRITTISH LEAGUE a 321 AIRPORT 443 SLAM BALL a 1429 UITI MANAGER a 1699 PERMER PICS a 1763 AIR TRAFFIC a 1771 MICRO MART 3 QUIZ GAMES a 1031 PERK TRUS SICK a 1031 PERK TRUS SICK a 1031 PERK TRUS SICK a 1731 MICRO MART 3 QUIZ GAMES	AMICA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOWE MUSIC MAKERS a 220 FUNK KEYBOARDS a 202 FUNK KEYBOARDS a 202 MED V3.2 a 729 DRUM MACHINE a 787 SONIC DRUM KIT a 788 OCTAMED V2 a 136 THE ART OF MED a 192 THE COMPOSER a 518 MUSIC DATABASE a 981 AUDIO ENGINEER a 1268 HIPPO ILAYER a 1681 PROTRACKER 3.5 a 1791 OCTATUTOR V5 a 1971 SAMPLE MAKER CLASSIC — POP a 1029 COTTONEY SONG a 201 PIANO CLASSICS a 234 VIVALOZ DISK a 342 AMIGA-DEUS a 131 GIG CONCERT V2 a 620 BAGPIPE MUSIC	PROGRAMMERS a 288 A SASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SLIDESHOW MAKER a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK a 242 MENU MAKER b 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK V VIRUS CONTROL a 506 A1200 VIRUS a 160 M.V.K. PLUS a 1030 A12 DIONIC TOOLS a 512 4 DSK TOOL KIT a 1629 UN-ARCHIVER a 1983 CRUNCHERS 60 DISK & SYSTEM a 166 SYSTEM TESTER a 467 FILE UNDELETE a 194 DISK OPTIMISE a 186 LENGINEES FITT
a 1642 A1200 EX RACING a 1693 EX BRACKES a 1893 BOSSCAR a 1893 BOSSCAR a 1893 BOSSCAR a 324 EXPLICATION SIMULATORS a 325 SALANCE-SUB a 326 EXPLICATION B 327	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1182 A12 NIGHTMARE a 1170 A12 LOBBS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLO STAR-TREK PUZZLER GAMES a 953 CHANEQUE 2 DISK a 859 10 PUZZLERS a 1550 PUZZLERS a 1550 PUZZLEPTS a 1566 EXPERT BALLS a 1633 THE WOOGLIES a 1765 BRAIN BALL a 1646 EXPERT BALLS AMANAGER GAMES a 876 SCOTTISH LEAGUE a 321 AIRPORT a 443 SLAM BALL a 1429 ULTI MANAGER a 1659 PREMIER PICS a 1763 AIR TRAFFIC a 1771 MICRO MART 3 CUIZ GAMES a 1031 TREK TRIY 5 DISK	AMICA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOWE MUSIC MAKERS a 220 FUNK KEYBOARDS a 202 FUNK KEYBOARDS a 202 MED V3.2 a 729 DRUM MACHINE a 787 SONIC DRUM KIT a 788 OCTAMED V2 a 136 THE ART OF MED a 192 THE COMPOSER a 518 MUSIC DATABASE a 981 AUDIO ENGINEER a 1268 HIPPO ILAYER a 1681 PROTRACKER 3.5 a 1791 OCTATUTOR V5 a 1971 SAMPLE MAKER CLASSIC — POP a 1029 COTTONEY SONG a 201 PIANO CLASSICS a 234 VIVALOZ DISK a 342 AMIGA-DEUS a 131 GIG CONCERT V2 a 620 BAGPIPE MUSIC	PROGRAMMERS a 288 A SASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SLIDESHOW MAKER a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK a 242 MENU MAKER b 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK V VIRUS CONTROL a 506 A1200 VIRUS a 160 M.V.K. PLUS a 1030 A12 DIONIC TOOLS a 512 4 DSK TOOL KIT a 1629 UN-ARCHIVER a 1983 CRUNCHERS 60 DISK & SYSTEM a 166 SYSTEM TESTER a 467 FILE UNDELETE a 194 DISK OPTIMISE a 186 LENGINEES FITT
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDTOR 96/7 SIMULATORS a 323 ESALANCE-SUB a 323 ESALANCE-SUB a 324 SEALANCE-SUB a 1273 A12 TRAIN DRIVER SPORTS GAMES a 1014 CRAZY GOLF a 1014 CRAZY GOLF a 1171 2 DKX CRS-ANGLER a 1731 A12 TRAIN DRIVER 1373 A12 TON FISHINI a 1465 A12 2 DISK TENNIS a 1251 TOUR TENNIS a 1251 TOUR TENNIS a 1251 TOUR TENNIS a 1261 TOUR TENNIS a 1271 TOUR TENNIS a 1281 TOUR TENNIS a 1813 GAME TAMER V4.5 a 1814 CHE V10 DATE V1	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1132 A12 NIGHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLD STAR-TREK PUZZIER GAMES a 953 CHANFOUE 2 DISK a 859 10 PUZZIERS a 1550 PUZZIER TIS a 1650 PUZZIER TIS a 1650 PUZZIER BALLS a 1633 THE WOOGLIES a 1765 BRANB BALLS MANAGER GAMES a 876 SCOTTISH LEAGUE a 321 AIRPORT a 443 SLAM BALL a 1429 UITI MANAGER a 1699 PERMER PICS a 1699 TREMER PICS a 1751 MICRO MART 3 a 1771 MICRO MART 3 COULZ GAMES a 1771 MICRO MART 3 COULZ GAMES a 1731 TREK TRIV S DISK a 716 POP MUSIC QUIZ	AMICA VIDEO a 329 VIDEO INSCRIPT a 790 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MANCERS a 220 FUNK KEYBOARDS a 202 FUNK KEYBOARDS a 202 MED V3.2 a 725 DRUM MACHINE a 783 FONIC DRUM KIT a 783 OCTAMED V2 a 136 THE ART OF MED a 192 THE COMPOSER a 1681 BMUSIC DATABASE a 981 AUDIO ENGINEER a 1258 HIPPO PLAYER a 1681 PROTRACKER 3.5 a 1791 OCTATUTOR V5 a 1971 SAMPLE MAKER CLASSIC POP a 1029 COTTONEY SONG a 201 PLANO CLASSICS a 234 VIVALDI 2 DISK a 342 AMIGA-DEUS a 130 IGI CONCERT V2 a 260 BB AEVPRESSION V2 a 1473 BIJGI CONCERT V2 a 260 BB AEVPRESSION V2 a 1473 BIJGI CONCERT V2 a 260 BB AEVPRESSION V2 a 1473 BIJGI CONCERT V2 a 260 BB AEVPRESSION V2 a 1473 BIJGI CONCERT V2 a 260 BB AEVPRESSION V2 a 1473 BIJGI CONCERT V2 a 260 BB AEVPRESSION V2 a 1473 BIJGI CONCERT V2 a 260 BB AEVPRESSION V2 a 1473 BIJCI CONCERT V2 a 260 BB AEVPRESSION V2 a 1473 BIJCI CONCERT V2 a 260 BB AEVPRESSION V2 a 1473 BIJCI CONCERT V2 a 261 BAEVPRESSION V2 a 1473 BIJCI CONCERT V2 a 261 BAEVPRESSION V2 a 1473 BIJCI CONCERT V2 a 261 BAEVPRESSION V2 a 1473 BIJCI CONCERT V2 a 261 BAEVPRESSION V2 a 1473 BIJCI CONCERT V2 a 261 BAEVPRESSION V2 a 1473 BIJCI CONCERT V2 a 261 BAEVPRESSION V2 a 1473 BIJCI CONCERT V2 a 261 BAEVPRESSION V2 a 1473 BIJCI CONCERT V2 a 261 BAEVPRESSION V2 a 1473 BIJCI CONCERT V3 a 261 BAEVPRESSION V2 a 1474 BIJCI CONCERT V3 a 261 BAEVPRESSION V2 a 1474 BIJCI CONCERT V3 a 261 BAEVPRESSION V2 a 1474 BIJCI CONCERT V3 a 261 BAEVPRESSION V2 a 1474 BIJCI CONCERT V3 a 1474 BIJCI CONCERT V4 a 1	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SLIDESHOW MAKER a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK V2 VIRUS CONTROL a 506 A1200 VIRUS a 160 M.VK. PLUS AMIGA UTILITIES a 1030 A12 DIONIC TOOLS a 1629 UN-ARCHIVER a 1983 CRUNCHERS 60 DISK & SYSTEM a 166 SYSTEM TESTER a 617 AMIGA UTILITIES a 1983 CRUNCHERS 60 DISK & SYSTEM a 166 SYSTEM TESTER a 617 TILL UNDELETE a 194 DISK OFTIMISE a 195 SE FINGINEERS KIT a 245 FIX DISK
a 1642 A1200 EX RACING a 1705 A12 AER RACERS a 1893 BOSSCAR a 074 F1 EDTOR 96/7 SIMULATORS a 323 ESALANCE-SUB a 323 ESALANCE-SUB a 324 SEALANCE-SUB a 1273 A12 TRAIN DRIVER SPORTS GAMES a 1014 CRAZY GOLF a 1014 CRAZY GOLF a 1171 2 DKX CRS-ANGLER a 1731 A12 TRAIN DRIVER 1373 A12 TON FISHINI a 1465 A12 2 DISK TENNIS a 1251 TOUR TENNIS a 1251 TOUR TENNIS a 1251 TOUR TENNIS a 1261 TOUR TENNIS a 1271 TOUR TENNIS a 1281 TOUR TENNIS a 1813 GAME TAMER V4.5 a 1814 CHE V10 DATE V1	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1182 A12 NIGHTMARE a 1170 A12 LOBDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLO STAR-TREK PUZZLER GAMES a 953 CHANEQUE 2 DISK a 859 10 PUZZLERS a 1550 PUZZLERS a 1550 PUZZLE PITS a 1566 EXPERT BALLS a 1633 THE WOOGLIES a 1765 BRAIN BALL a 1878 BLOOD BALL a 1879 BLOOD BALL a 1429 UIT MANAGER a 1699 PREMIER PICS a 1763 AIR TRAFFIC a 1771 MICRO MART 3 CUIZ GAMES a 1031 TREK TRIV 5 DISK a 716 POP MUSIC QUIZ A 309 THE QUIZ MASTER a 1031 TREK TRIV 5 DISK a 716 POP MUSIC QUIZ MASTER a 1031 TREK TRIV 5 DISK a 716 POP MUSIC QUIZ MASTER a 1031 TREK TRIV 5 DISK a 716 POP MUSIC QUIZ MASTER a 1031 TREK TRIV 5 DISK a 716 POP MUSIC QUIZ MASTER	AMICA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISC a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 202 MED V3.2 a 729 DRUM MACHINE a 783 SONIC DRUM KIT a 738 OCTANED V2 a 136 THE ART OF MED a 192 THE COMPOSER a 1981 AUDIO ENGINEER a 1581 AUDIO ENGINEER a 1681 PROTRACKER 3.5 a 1991 SAMPLE MAKER CLASSIC — POP a 1029 COTTONEYE SONG a 201 PIANO CLASSICS a 234 VIVALDI 2 DISK a 342 AMIGA-DEUS a 1293 LIGOTONETY V2 a 520 BAGPIPE MUSIC a 481 ENGINEER 4 281 ENGIN	PROGRAMMERS a 288 A BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1057 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SIDESHOW MAKER a 808 MAKE A DISK a 249 MEDISHOW MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK V VIRUS CONTROL a 506 A1200 VIRUS a 160 M.V. PUS AMIGA UTILITIES a 1030 A12 DIONIC TOOLS a 512 A DSK TOOL KIT a 1629 UN-ARCHIVER a 1983 CRUNCHERS 60 DISK & SYSTEM a 166 YSTEM TESTER a 167 FILE UNDELETE a 194 DISK OPTIMISE a 155 ENGINEERS KIT a 245 FIX DISK a 168 HARDWARE MAN-
a 1642 A1200 EX RACING a 1693 BOSSCAR a 1893 BOSSCAR a 1893 BOSSCAR a 1893 BOSSCAR a 1893 BOSSCAR b 1974 FLEDTOR 96/7 SIMULATORS a 332 SEALANCE SUB a 333 SEALANCE SUB a 333 SEALANCE SUB a 133 BATTLE CARS V2 a 926 HELICOPTER a 1273 ALT TRAIN DRIVER SPORTS GAMES a 1014 CRAZY GOLF a 1014 CRAZY GOLF a 1014 CRAZY GOLF a 1373 ICE HOCKEY a 1373 ICE HOCKEY a 1373 ICE HOCKEY a 1373 ICE HOCKEY a 1370 GOLF 91-NI a 165 A12 2 DISK TEINIS a 1630 INTER CRICKET a 1700 GOLF 9 HOLES HINTS & CHEATS a 418 1000 CHEATS a 218 ASSWORD MAINA a 1813 GAME TAMER V4.5 a 820 MEGA CHEATS a 813 GAME SOLUTIONS a 1358 GAME SOLUTIONS a 1558 GAME SOLUTIONS	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1132 A12 INICHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLD STAR-TREK PUZZIER GAMES a 952 CHANEGUE 2 DISK a 859 10 PUZZIERS a 1550 PUZZIE PITS a 1566 EXPERT BALLS a 1633 THE WOOGLIES a 1765 BRAN BALLS ANAGER GAMES a 876 SCOTTISH IEAGUE a 321 AIRPORT a 443 SLAM BALL a 1429 ULTI MANAGER a 1599 PERMER PICS a 1763 DRAMES a 1763 DRAMER PICS a 1763 AIR TRAFFIC a 1771 MICRO MART 3 CUIZ GAMES a 178 FOR POISIC QUIZ GAMES a 178 TO POISI COUIZ GAMES a 169 THE QUIZ MASTER a 169 THE QUIZ MASTER a 169 THE QUIZ MASTER a 178 TO POISI COUIZ GAMES a 178 THE POISI COUIZ GASTER a 169 THE QUIZ MASTER a 169 WILLER QUE SCOPTILING	AMICA VIDEO a 329 VIDEO INSCRIPT a 790 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 202 FUNK KEYBOARDS a 202 MED V3.2 a 729 DRUM MACHINE a 788 OCTAMED V2 a 136 THE ART OF MED a 192 THE COMPOSER a 181 MUSIC DATABASE a 981 AUDIO ENGINEER a 1288 HIPPO PLAYER a 1681 PROTRACKER 3.5 a 1791 OCTATUTOR V5 a 1971 SAMPLE MAKER CLASSIC — POP a 1029 COTTONEY SONG a 214 PLANG AUSTON a 124 AUSTON AUSTON a 125 THE AUSTON B 125 THE AUSTON A 125 THE A	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SLIDESHOW MAKER a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK V2 VIRUS CONTROL a 506 A1200 VIRUS a 160 M.VX. PLUS AMIGA UTILITIES a 1030 A12 DIONIC TOOLS a 612 4 DSK TOOL KIT a 1629 UN-ARCHIVER a 1983 CRUNCHERS 60 DISK & SYSTEM a 166 SYSTEM TESTER a 194 DISK OPTIMISE a 194 DISK OPTIMISE a 195 SE ENGINEERS KIT a 245 FIX DISK a 166 HARDWARE MAN-
a 1642 A1200 EX RACING a 1932 AER RACERS a 1933 BOSSCAR a 1933 BOSSCAR a 1934 BOSSCAR a 1934 BOSSCAR b 1944 BOTTON SIMULATORS a 1925 FALANCE-SUB a 1936 RELICOPTER a 1937 AER TRAIN DRIVER SPORTS GAMES a 1014 CRAZY GOLF a 1014 CRAZY GOLF a 1971 A12 GOK RES-MOLER 1973 ALT SAMELER 1973 ALT SAMELER 1973 ALT SAMELER 1974 ALT SAMELER 1975 ALT SAMELER 1975 ALT SAMELER 1975 ALT SAMELER 1976 ALT SAMELER 1977 ALT SAMELER 1977 ALT SAMELER 1978 ALT SAMELER 1978 ALT SAMELER 1978 ALT SAMELER 1979 ALT SAMELER 1970 ALT SAMELER	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1132 A12 INICHTMARE a 1170 A12 LORDS 2 DSK a 1431 UFO UNCLOTHED a 1547 SOLD STAR-TREK PUZZIER GAMES a 952 CHANEGUE 2 DISK a 859 10 PUZZIERS a 1550 PUZZIE PITS a 1566 EXPERT BALLS a 1633 THE WOOGLIES a 1765 BRAN BALLS ANAGER GAMES a 876 SCOTTISH IEAGUE a 321 AIRPORT a 443 SLAM BALL a 1429 ULTI MANAGER a 1599 PERMER PICS a 1763 DRAMES a 1763 DRAMER PICS a 1763 AIR TRAFFIC a 1771 MICRO MART 3 CUIZ GAMES a 178 FOR POISIC QUIZ GAMES a 178 TO POISI COUIZ GAMES a 169 THE QUIZ MASTER a 169 THE QUIZ MASTER a 169 THE QUIZ MASTER a 178 TO POISI COUIZ GAMES a 178 THE POISI COUIZ GASTER a 169 THE QUIZ MASTER a 169 WILLER QUE SCOPTILING	AMICA VIDEO a 329 VIDEO INSCRIPT a 790 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 202 FUNK KEYBOARDS a 202 MED V3.2 a 729 DRUM MACHINE a 788 OCTAMED V2 a 136 THE ART OF MED a 192 THE COMPOSER a 181 MUSIC DATABASE a 981 AUDIO ENGINEER a 1288 HIPPO PLAYER a 1681 PROTRACKER 3.5 a 1791 OCTATUTOR V5 a 1971 SAMPLE MAKER CLASSIC — POP a 1029 COTTONEY SONG a 214 PLANG AUSTON a 124 AUSTON AUSTON a 125 THE AUSTON B 125 THE AUSTON A 125 THE A	PROGRAMMERS a 288 A-BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 239 SLIDESHOW MAKER a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK V2 VIRUS CONTROL a 506 A1200 VIRUS a 160 M.VX. PLUS AMIGA UTILITIES a 1030 A12 DIONIC TOOLS a 612 4 DSK TOOL KIT a 1629 UN-ARCHIVER a 1983 CRUNCHERS 60 DISK & SYSTEM a 166 SYSTEM TESTER a 194 DISK OPTIMISE a 194 DISK OPTIMISE a 195 SE ENGINEERS KIT a 245 FIX DISK a 166 HARDWARE MAN-
a 1642 A1200 EX RACING a 1693 A120 A120 EX RACING a 1693 BOSSCAR a 1693 BOSSCAR a 1693 BOSSCAR a 1693 BOSSCAR b 1705 A120 A120 a 1705 A120 A120 a 1705	## 376 CLOBAL NUKE WAR ## 376 CLOBAL STAR STAR ## 31170 ALT LORDS 2 DSK ## 313 UFO UNCLOTHED ## 3154 TSUD STAR-TIREK ## 352 CHARHOUE 2 DISK ## 353 CHARHOUE 2 DISK ## 354 CHARHOUE 2 DISK ## 354 DUZZLER BALLS ## 354 DUZZLER BALLS ## 3150 PUZZLER BALLS ## 316 SEVENTISH ## 316 SEVENTIS	AMICA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOWE MUSIC MAKERS a 220 FUNK KEYBOARDS a 202 FUNK KEYBOARDS a 202 MED V3.2 a 729 DRIM MACHINE a 783 SOTAMED V2 a 783 DOTAMED V2 a 136 THE ART OF MED a 192 THE COMPOSER a 618 MUSIC DATABASE a 981 AUDIO ENGINEER a 1268 HIPPO PLAYER a 1681 PROTRACKER 3.5 a 1791 CATAUTOR V5 a 1971 SAMPLE MAKER CLASSIG - POP a 1029 COTTONEY SONG a 201 PIANO CLASSIGS a 342 AMIGA-DEUS a 123 DIGI COCKERT V2 a 620 BAGPIPE MUSIC a 473 RHYTHM'S DANCER a 1759 CUTTAN SONGER a 1759 COTTAN SONGER a 1759 GUTTAN SONGER a 1759 GUTTAN SONGER a 1759 GUTTAN SONGER a 1759 GUTTAN BULES a 1759 HEAVY METAL a 1880 TEKNO MAGE 96 a 1880 TEKNO MAGE	PROGRAMMERS a 288 A SASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 229 SLIDESHOW MAKER a 229 SLIDESHOW MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK V VIRUS CONTROL a 506 A1200 VIRUS a 160 M.V.K. PLUS a 1030 A12 DIONIC TOOLS a 512 4 DSX TOOL KIT a 1629 UN-ARCHIVER a 1983 CRUNCHERS 60 DISK & SYSTEM a 166 SYSTEM TESTER a 467 FILE UNDELETE a 1944 DISK OPTIMISE a 1956 ENGINEERS KIT a 245 FIX DISK a 168 HARDWARE MODS AMIGA EDUCATION AMIGA EDUCATION
a 1642 A1200 EX RACING a 1693 A120 A120 EX RACING a 1693 BOSSCAR a 1693 BOSSCAR a 1693 BOSSCAR a 1693 BOSSCAR b 1705 A120 A120 a 1705 A120 A120 a 1705	## 376 CLOBAL NUKE WAR ## 376 CLOBAL STAR STAR ## 31170 ALT LORDS 2 DSK ## 313 UFO UNCLOTHED ## 3154 TSUD STAR-TIREK ## 352 CHARHOUE 2 DISK ## 353 CHARHOUE 2 DISK ## 354 CHARHOUE 2 DISK ## 354 DUZZLER BALLS ## 354 DUZZLER BALLS ## 3150 PUZZLER BALLS ## 316 SEVENTISH ## 316 SEVENTIS	AMICA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOWE MUSIC MAKERS a 220 FUNK KEYBOARDS a 202 FUNK KEYBOARDS a 202 MED V3.2 a 729 DRIM MACHINE a 783 SOTAMED V2 a 783 DOTAMED V2 a 136 THE ART OF MED a 192 THE COMPOSER a 618 MUSIC DATABASE a 981 AUDIO ENGINEER a 1268 HIPPO PLAYER a 1681 PROTRACKER 3.5 a 1791 CATAUTOR V5 a 1971 SAMPLE MAKER CLASSIG - POP a 1029 COTTONEY SONG a 201 PIANO CLASSIGS a 342 AMIGA-DEUS a 123 DIGI COCKERT V2 a 620 BAGPIPE MUSIC a 473 RHYTHM'S DANCER a 1759 CUTTAN SONGER a 1759 COTTAN SONGER a 1759 GUTTAN SONGER a 1759 GUTTAN SONGER a 1759 GUTTAN SONGER a 1759 GUTTAN BULES a 1759 HEAVY METAL a 1880 TEKNO MAGE 96 a 1880 TEKNO MAGE	PROGRAMMERS a 288 A SASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 229 SLIDESHOW MAKER a 229 SLIDESHOW MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK V VIRUS CONTROL a 506 A1200 VIRUS a 160 M.V.K. PLUS a 1030 A12 DIONIC TOOLS a 512 4 DSX TOOL KIT a 1629 UN-ARCHIVER a 1983 CRUNCHERS 60 DISK & SYSTEM a 166 SYSTEM TESTER a 467 FILE UNDELETE a 1944 DISK OPTIMISE a 1956 ENGINEERS KIT a 245 FIX DISK a 168 HARDWARE MODS AMIGA EDUCATION AMIGA EDUCATION
a 1642 A1200 EX RACING a 1693 A120 A120 EX RACING a 1693 BOSSCAR a 1693 BOSSCAR a 1693 BOSSCAR a 1693 BOSSCAR b 1705 A120 A120 a 1705 A120 A120 a 1705	## 376 CLOBAL NUKE WAR ## 376 CLOBAL STAR STAR ## 31170 ALT LORDS 2 DSK ## 313 UFO UNCLOTHED ## 3154 TSUD STAR-TIREK ## 352 CHARHOUE 2 DISK ## 353 CHARHOUE 2 DISK ## 354 CHARHOUE 2 DISK ## 354 DUZZLER BALLS ## 354 DUZZLER BALLS ## 3150 PUZZLER BALLS ## 316 SEVENTISH ## 316 SEVENTIS	AMICA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOWE MUSIC MAKERS a 220 FUNK KEYBOARDS a 202 FUNK KEYBOARDS a 202 MED V3.2 a 729 DRIM MACHINE a 783 SOTAMED V2 a 783 DOTAMED V2 a 136 THE ART OF MED a 192 THE COMPOSER a 618 MUSIC DATABASE a 981 AUDIO ENGINEER a 1268 HIPPO PLAYER a 1681 PROTRACKER 3.5 a 1791 CATAUTOR V5 a 1971 SAMPLE MAKER CLASSIG - POP a 1029 COTTONEY SONG a 201 PIANO CLASSIGS a 342 AMIGA-DEUS a 123 DIGI COCKERT V2 a 620 BAGPIPE MUSIC a 473 RHYTHM'S DANCER a 1759 CUTTAN SONGER a 1759 COTTAN SONGER a 1759 GUTTAN SONGER a 1759 GUTTAN SONGER a 1759 GUTTAN SONGER a 1759 GUTTAN BULES a 1759 HEAVY METAL a 1880 TEKNO MAGE 96 a 1880 TEKNO MAGE	PROGRAMMERS a 288 A SASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 229 SLIDESHOW MAKER a 229 SLIDESHOW MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK V VIRUS CONTROL a 506 A1200 VIRUS a 160 M.V.K. PLUS a 1030 A12 DIONIC TOOLS a 512 4 DSX TOOL KIT a 1629 UN-ARCHIVER a 1983 CRUNCHERS 60 DISK & SYSTEM a 166 SYSTEM TESTER a 467 FILE UNDELETE a 1944 DISK OPTIMISE a 1956 ENGINEERS KIT a 245 FIX DISK a 168 HARDWARE MODS AMIGA EDUCATION AMIGA EDUCATION
a 1642 A1200 EX RACING a 1693 A120 A120 EX RACING a 1693 BOSSCAR a 1693 BOSSCAR a 1693 BOSSCAR a 1693 BOSSCAR b 1705 A120 A120 a 1705 A120 A120 a 1705 A120 A120 a 1705 A120 a	## 376 CLOBAL NUKE WAR ## 376 CLOBAL STAR STAR ## 31170 ALT LORDS 2 DSK ## 313 UFO UNCLOTHED ## 3154 TSUD STAR-TIREK ## 352 CHARHOUE 2 DISK ## 353 CHARHOUE 2 DISK ## 354 CHARHOUE 2 DISK ## 354 DUZZLER BALLS ## 354 DUZZLER BALLS ## 3150 PUZZLER BALLS ## 316 SEVENTISH ## 316 SEVENTIS	AMICA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOWE MUSIC MAKERS a 220 FUNK KEYBOARDS a 202 FUNK KEYBOARDS a 202 MED V3.2 a 729 DRIM MACHINE a 783 SOTAMED V2 a 783 DOTAMED V2 a 136 THE ART OF MED a 192 THE COMPOSER a 618 MUSIC DATABASE a 981 AUDIO ENGINEER a 1268 HIPPO PLAYER a 1681 PROTRACKER 3.5 a 1791 CATAUTOR V5 a 1971 SAMPLE MAKER CLASSIG - POP a 1029 COTTONEY SONG a 201 PIANO CLASSIGS a 342 AMIGA-DEUS a 123 DIGI COCKERT V2 a 620 BAGPIPE MUSIC a 473 RHYTHM'S DANCER a 1759 CUTTAN SONGER a 1759 COTTAN SONGER a 1759 GUTTAN SONGER a 1759 GUTTAN SONGER a 1759 GUTTAN SONGER a 1759 GUTTAN BULES a 1759 HEAVY METAL a 1880 TEKNO MAGE 96 a 1880 TEKNO MAGE	PROGRAMMERS a 288 A SASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 229 SLIDESHOW MAKER a 229 SLIDESHOW MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK V VIRUS CONTROL a 506 A1200 VIRUS a 160 M.V.K. PLUS a 1030 A12 DIONIC TOOLS a 512 4 DSX TOOL KIT a 1629 UN-ARCHIVER a 1983 CRUNCHERS 60 DISK & SYSTEM a 166 SYSTEM TESTER a 467 FILE UNDELETE a 1944 DISK OPTIMISE a 1956 ENGINEERS KIT a 245 FIX DISK a 168 HARDWARE MODS AMIGA EDUCATION AMIGA EDUCATION
a 1642 A1200 EX RACING a 1693 A120 A120 EX RACING a 1693 BOSSCAR a 1693 BOSSCAR a 1693 BOSSCAR a 1693 BOSSCAR b 1705 A120 A120 a 1705 A120 A120 a 1705 A120 A120 a 1705 A120 a	## 376 CLOBAL NUKE WAR ## 376 CLOBAL STAR STAR ## 31170 ALT LORDS 2 DSK ## 313 UFO UNCLOTHED ## 3154 TSUD STAR-TIREK ## 352 CHARHOUE 2 DISK ## 353 CHARHOUE 2 DISK ## 354 CHARHOUE 2 DISK ## 354 DUZZLER BALLS ## 354 DUZZLER BALLS ## 3150 PUZZLER BALLS ## 316 SEVENTISH ## 316 SEVENTIS	AMICA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOWE MUSIC MAKERS a 220 FUNK KEYBOARDS a 202 FUNK KEYBOARDS a 202 MED V3.2 a 729 DRIM MACHINE a 783 SOTAMED V2 a 783 DOTAMED V2 a 136 THE ART OF MED a 192 THE COMPOSER a 618 MUSIC DATABASE a 981 AUDIO ENGINEER a 1268 HIPPO PLAYER a 1681 PROTRACKER 3.5 a 1791 CATAUTOR V5 a 1971 SAMPLE MAKER CLASSIG - POP a 1029 COTTONEY SONG a 201 PIANO CLASSIGS a 342 AMIGA-DEUS a 123 DIGI COCKERT V2 a 620 BAGPIPE MUSIC a 473 RHYTHM'S DANCER a 1759 CUTTAN SONGER a 1759 COTTAN SONGER a 1759 GUTTAN SONGER a 1759 GUTTAN SONGER a 1759 GUTTAN SONGER a 1759 GUTTAN BULES a 1759 HEAVY METAL a 1880 TEKNO MAGE 96 a 1880 TEKNO MAGE	PROGRAMMERS a 288 A SASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1067 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 229 SLIDESHOW MAKER a 229 SLIDESHOW MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK a 242 MENU MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK V VIRUS CONTROL a 506 A1200 VIRUS a 160 M.V.K. PLUS a 1030 A12 DIONIC TOOLS a 512 4 DSX TOOL KIT a 1629 UN-ARCHIVER a 1983 CRUNCHERS 60 DISK & SYSTEM a 166 SYSTEM TESTER a 467 FILE UNDELETE a 1944 DISK OPTIMISE a 1956 ENGINEERS KIT a 245 FIX DISK a 168 HARDWARE MODS AMIGA EDUCATION AMIGA EDUCATION
a 1642 A1200 EX RACING a 1693 PAS AER RACERS a 1893 BOSSCAR a 1893 BOSSCAR a 1893 BOSSCAR a 321 SEALANCE-SUB a 323 EXALANCE-SUB a 323 BATTLE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER BOOKERS 5 HELICOPTER b 1014 CRAY GOLF b 1015 CRAY GOLF b 1015 CRAY GOLF b 1015 CRAY GOLF b 1016 CRAY GOLF	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1132 A12 NICHTMARE a 1170 A12 LOBBS 2 DSK a 1431 UFO UNICLOTHED a 1547 SOLD STAR-TREK PUZZIER GAMES a 953 CHANEQUE 2 DISK a 899 10 PUZZIERS a 1550 PUZZIER BALLS a 1565 SPERT BALLS a 1565 SPERT BALLS a 1765 BRAIN BALLS MANAGER GAMES a 1765 BRAIN BALLS a 1765 BRAIN BALLS a 181 BLOOD BALL a 1429 ULTI MANAGER a 1699 PREMIER PICS a 1761 AT AT A STAR A	AMICA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 202 FUNK KEYBOARDS a 202 MED V3.2 a 729 DRUM MACHINE a 788 TOSNIC DRUM KIT a 788 OCTANBED V2 a 135 THE ART OF MED a 192 THE COMPOSER a 618 MUSIC DATABASE a 981 AUDIO ENGINEER a 1268 HIPPO PLAYER a 1681 PROTRACKER 3.5 a 1791 OCTATUTOR V5 a 1971 SAMPLE MAKER CLASSIC — POP a 1029 COTTONEYE SONG a 201 PIANO CLASSICS a 234 VINALDI 2 DISK a 342 AMIGA-DEUS a 139 DIG CONCERT V2 a 620 BAGPPE MUSIC a 478 THE THIN'S DANCER a 13572 MEG DANCER a 13672 HEAVY METAL a 1800 TEKNO MAGE 96 a 1968 BEATLE MANIA 5 AMPLES — MODS a 660 KORG DIV X 3 DISK a 647 SOUND X 3 DISK 3 DISK a 660 KORG DIV X 3 DISK a 661 SOUND X 3 DISK a 661 SOUND X 3 DISK a 661 SOUND X 3 DISK	PROGRAMMERS a 288 A BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1057 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 289 SIDESHOW MAKER a 808 MAKE A DISK a 249 SIDESHOW MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK V VIRUS CONTROL a 506 A1200 VIRUS a 160 M.V. PUS AMIGA UTILITIES a 1030 A12 DIONIC TOOLS a 512 A DSK TOOL KIT a 1629 UN-ARCHIVER a 1983 CRUNCHERS 60 DISK & SYSTEM a 166 SYSTEM ESTER a 467 FILE UNDELETE a 194 DISK OPTIMISE a 156 SEGNINEERS KIT a 245 FIX DISK a 168 HARDWARE MAN-UAL a 1881 HARDWARE MODS AMIGA EDUCATION a 1881 HARDWARE MODS AMIGA EDUCATION a 1881 HARDWARE MODS AMIGA EDUCATION a 1532 MATHS 5 DISKS a 486 LANGUAGES 4 DISK
a 1642 A1200 EX RACING a 1693 PAS AER RACERS a 1893 BOSSCAR a 1893 BOSSCAR a 1893 BOSSCAR a 321 SEALANCE-SUB a 323 EXALANCE-SUB a 323 BATTLE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER BOOKERS 5 HELICOPTER b 1014 CRAY GOLF b 1015 CRAY GOLF b 1015 CRAY GOLF b 1015 CRAY GOLF b 1016 CRAY GOLF	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1132 A12 NICHTMARE a 1170 A12 LOBBS 2 DSK a 1431 UFO UNICLOTHED a 1547 SOLD STAR-TREK PUZZIER GAMES a 953 CHANEQUE 2 DISK a 899 10 PUZZIERS a 1550 PUZZIER BALLS a 1565 SPERT BALLS a 1565 SPERT BALLS a 1765 BRAIN BALLS MANAGER GAMES a 1765 BRAIN BALLS a 1765 BRAIN BALLS a 181 BLOOD BALL a 1429 ULTI MANAGER a 1699 PREMIER PICS a 1761 AT AT A STAR A	AMICA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 202 FUNK KEYBOARDS a 202 MED V3.2 a 729 DRUM MACHINE a 788 TOSNIC DRUM KIT a 788 OCTANBED V2 a 135 THE ART OF MED a 192 THE COMPOSER a 618 MUSIC DATABASE a 981 AUDIO ENGINEER a 1268 HIPPO PLAYER a 1681 PROTRACKER 3.5 a 1791 OCTATUTOR V5 a 1971 SAMPLE MAKER CLASSIC — POP a 1029 COTTONEYE SONG a 201 PIANO CLASSICS a 234 VINALDI 2 DISK a 342 AMIGA-DEUS a 139 DIG CONCERT V2 a 620 BAGPPE MUSIC a 478 THE THIN'S DANCER a 13572 MEG DANCER a 13672 HEAVY METAL a 1800 TEKNO MAGE 96 a 1968 BEATLE MANIA 5 AMPLES — MODS a 660 KORG DIV X 3 DISK a 647 SOUND X 3 DISK 3 DISK a 660 KORG DIV X 3 DISK a 661 SOUND X 3 DISK a 661 SOUND X 3 DISK a 661 SOUND X 3 DISK	PROGRAMMERS a 288 A BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1057 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 289 SIDESHOW MAKER a 808 MAKE A DISK a 249 SIDESHOW MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK V VIRUS CONTROL a 506 A1200 VIRUS a 160 M.V. PUS AMIGA UTILITIES a 1030 A12 DIONIC TOOLS a 512 A DSK TOOL KIT a 1629 UN-ARCHIVER a 1983 CRUNCHERS 60 DISK & SYSTEM a 166 SYSTEM ESTER a 467 FILE UNDELETE a 194 DISK OPTIMISE a 156 SEGNINEERS KIT a 245 FIX DISK a 168 HARDWARE MAN-UAL a 1881 HARDWARE MODS AMIGA EDUCATION a 1881 HARDWARE MODS AMIGA EDUCATION a 1881 HARDWARE MODS AMIGA EDUCATION a 1532 MATHS 5 DISKS a 486 LANGUAGES 4 DISK
a 1642 A1200 EX RACING a 1693 PAS AER RACERS a 1893 BOSSCAR a 1893 BOSSCAR a 1893 BOSSCAR a 321 SEALANCE-SUB a 323 EXALANCE-SUB a 323 BATTLE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER BOOKERS 5 HELICOPTER b 1014 CRAY GOLF b 1015 CRAY GOLF b 1015 CRAY GOLF b 1015 CRAY GOLF b 1016 CRAY GOLF	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1132 A12 NICHTMARE a 1170 A12 LOBBS 2 DSK a 1431 UFO UNICLOTHED a 1547 SOLD STAR-TREK PUZZIER GAMES a 953 CHANEQUE 2 DISK a 899 10 PUZZIERS a 1550 PUZZIER BALLS a 1565 SPERT BALLS a 1565 SPERT BALLS a 1765 BRAIN BALLS MANAGER GAMES a 1765 BRAIN BALLS a 1765 BRAIN BALLS a 181 BLOOD BALL a 1429 ULTI MANAGER a 1699 PREMIER PICS a 1761 AT AT A STAR A	AMICA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 202 FUNK KEYBOARDS a 202 MED V3.2 a 729 DRUM MACHINE a 788 TOSNIC DRUM KIT a 788 OCTANBED V2 a 135 THE ART OF MED a 192 THE COMPOSER a 618 MUSIC DATABASE a 981 AUDIO ENGINEER a 1268 HIPPO PLAYER a 1681 PROTRACKER 3.5 a 1791 OCTATUTOR V5 a 1971 SAMPLE MAKER CLASSIC — POP a 1029 COTTONEYE SONG a 201 PIANO CLASSICS a 234 VINALDI 2 DISK a 342 AMIGA-DEUS a 139 DIG CONCERT V2 a 620 BAGPPE MUSIC a 478 THE THIN'S DANCER a 13572 MEG DANCER a 13672 HEAVY METAL a 1800 TEKNO MAGE 96 a 1968 BEATLE MANIA 5 AMPLES — MODS a 660 KORG DIV X 3 DISK a 647 SOUND X 3 DISK 3 DISK a 660 KORG DIV X 3 DISK a 661 SOUND X 3 DISK a 661 SOUND X 3 DISK a 661 SOUND X 3 DISK	PROGRAMMERS a 288 A BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1057 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 289 SIDESHOW MAKER a 808 MAKE A DISK a 249 SIDESHOW MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK V VIRUS CONTROL a 506 A1200 VIRUS a 160 M.V. PUS AMIGA UTILITIES a 1030 A12 DIONIC TOOLS a 512 A DSK TOOL KIT a 1629 UN-ARCHIVER a 1983 CRUNCHERS 60 DISK & SYSTEM a 166 SYSTEM ESTER a 467 FILE UNDELETE a 194 DISK OPTIMISE a 156 SEGNINEERS KIT a 245 FIX DISK a 168 HARDWARE MAN-UAL a 1881 HARDWARE MODS AMIGA EDUCATION a 1881 HARDWARE MODS AMIGA EDUCATION a 1881 HARDWARE MODS AMIGA EDUCATION a 1532 MATHS 5 DISKS a 486 LANGUAGES 4 DISK
a 1642 A1200 EX RACING a 1693 PAS AER RACERS a 1893 BOSSCAR a 1893 BOSSCAR a 1893 BOSSCAR a 321 SEALANCE-SUB a 323 EXALANCE-SUB a 323 BATTLE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER BOOKERS 5 HELICOPTER b 1014 CRAY GOLF b 1015 CRAY GOLF b 1015 CRAY GOLF b 1015 CRAY GOLF b 1016 CRAY GOLF	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1132 A12 NICHTMARE a 1170 A12 LOBBS 2 DSK a 1431 UFO UNICLOTHED a 1547 SOLD STAR-TREK PUZZIER GAMES a 953 CHANEQUE 2 DISK a 899 10 PUZZIERS a 1550 PUZZIER BALLS a 1565 SPERT BALLS a 1565 SPERT BALLS a 1765 BRAIN BALLS MANAGER GAMES a 1765 BRAIN BALLS a 1765 BRAIN BALLS a 181 BLOOD BALL a 1429 ULTI MANAGER a 1699 PREMIER PICS a 1761 AT AT A STAR A	AMICA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 202 FUNK KEYBOARDS a 202 MED V3.2 a 729 DRUM MACHINE a 788 TOSNIC DRUM KIT a 788 OCTANBED V2 a 135 THE ART OF MED a 192 THE COMPOSER a 618 MUSIC DATABASE a 981 AUDIO ENGINEER a 1268 HIPPO PLAYER a 1681 PROTRACKER 3.5 a 1791 OCTATUTOR V5 a 1971 SAMPLE MAKER CLASSIC — POP a 1029 COTTONEYE SONG a 201 PIANO CLASSICS a 234 VINALDI 2 DISK a 342 AMIGA-DEUS a 139 DIG CONCERT V2 a 620 BAGPPE MUSIC a 478 THE THIN'S DANCER a 13572 MEG DANCER a 13672 HEAVY METAL a 1800 TEKNO MAGE 96 a 1968 BEATLE MANIA 5 AMPLES — MODS a 660 KORG DIV X 3 DISK a 647 SOUND X 3 DISK 3 DISK a 660 KORG DIV X 3 DISK a 661 SOUND X 3 DISK a 661 SOUND X 3 DISK a 661 SOUND X 3 DISK	PROGRAMMERS a 288 A BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1057 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 289 SIDESHOW MAKER a 808 MAKE A DISK a 249 SIDESHOW MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK V VIRUS CONTROL a 506 A1200 VIRUS a 160 M.V. PUS AMIGA UTILITIES a 1030 A12 DIONIC TOOLS a 512 A DSK TOOL KIT a 1629 UN-ARCHIVER a 1983 CRUNCHERS 60 DISK & SYSTEM a 166 SYSTEM ESTER a 467 FILE UNDELETE a 194 DISK OPTIMISE a 156 SEGNINEERS KIT a 245 FIX DISK a 168 HARDWARE MAN-UAL a 1881 HARDWARE MODS AMIGA EDUCATION a 1881 HARDWARE MODS AMIGA EDUCATION a 1881 HARDWARE MODS AMIGA EDUCATION a 1532 MATHS 5 DISKS a 486 LANGUAGES 4 DISK
a 1642 A1200 EX RACING a 1693 PAS AER RACERS a 1893 BOSSCAR a 1893 BOSSCAR a 1893 BOSSCAR a 321 SEALANCE-SUB a 323 EXALANCE-SUB a 323 BATTLE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER BOOKERS 5 HELICOPTER b 1014 CRAY GOLF b 1015 CRAY GOLF b 1015 CRAY GOLF b 1015 CRAY GOLF b 1016 CRAY GOLF	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1132 A12 NICHTMARE a 1170 A12 LOBBS 2 DSK a 1431 UFO UNICLOTHED a 1547 SOLD STAR-TREK PUZZIER GAMES a 953 CHANEQUE 2 DISK a 899 10 PUZZIERS a 1550 PUZZIER BALLS a 1565 SPERT BALLS a 1565 SPERT BALLS a 1765 BRAIN BALLS MANAGER GAMES a 1765 BRAIN BALLS a 1765 BRAIN BALLS a 181 BLOOD BALL a 1429 ULTI MANAGER a 1699 PREMIER PICS a 1761 AT AT A STAR A	AMICA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 202 FUNK KEYBOARDS a 202 MED V3.2 a 729 DRUM MACHINE a 788 TOSNIC DRUM KIT a 788 OCTANBED V2 a 135 THE ART OF MED a 192 THE COMPOSER a 618 MUSIC DATABASE a 981 AUDIO ENGINEER a 1268 HIPPO PLAYER a 1681 PROTRACKER 3.5 a 1791 OCTATUTOR V5 a 1971 SAMPLE MAKER CLASSIC — POP a 1029 COTTONEYE SONG a 201 PIANO CLASSICS a 234 VINALDI 2 DISK a 342 AMIGA-DEUS a 139 DIG CONCERT V2 a 620 BAGPPE MUSIC a 478 THE THIN'S DANCER a 13572 MEG DANCER a 13672 HEAVY METAL a 1800 TEKNO MAGE 96 a 1968 BEATLE MANIA 5 AMPLES — MODS a 660 KORG DIV X 3 DISK a 647 SOUND X 3 DISK 3 DISK a 660 KORG DIV X 3 DISK a 661 SOUND X 3 DISK a 661 SOUND X 3 DISK a 661 SOUND X 3 DISK	PROGRAMMERS a 288 A BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1057 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 289 SIDESHOW MAKER a 808 MAKE A DISK a 249 SIDESHOW MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK V VIRUS CONTROL a 506 A1200 VIRUS a 160 M.V. PUS AMIGA UTILITIES a 1030 A12 DIONIC TOOLS a 512 A DSK TOOL KIT a 1629 UN-ARCHIVER a 1983 CRUNCHERS 60 DISK & SYSTEM a 166 SYSTEM ESTER a 467 FILE UNDELETE a 194 DISK OPTIMISE a 156 SEGNINEERS KIT a 245 FIX DISK a 168 HARDWARE MAN-UAL a 1881 HARDWARE MODS AMIGA EDUCATION a 1881 HARDWARE MODS AMIGA EDUCATION a 1881 HARDWARE MODS AMIGA EDUCATION a 1532 MATHS 5 DISKS a 486 LANGUAGES 4 DISK
a 1642 A1200 EX RACING a 1693 PAS AER RACERS a 1893 BOSSCAR a 1893 BOSSCAR a 1893 BOSSCAR a 321 SEALANCE-SUB a 323 EXALANCE-SUB a 323 BATTLE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER BOOKERS 5 HELICOPTER b 1014 CRAY GOLF b 1015 CRAY GOLF b 1015 CRAY GOLF b 1015 CRAY GOLF b 1016 CRAY GOLF	STRATEGY GAMES a 876 GLOBAL NUKE WAR a 826 IND-ESPIONAGE a 1132 A12 NICHTMARE a 1170 A12 LOBBS 2 DSK a 1431 UFO UNICLOTHED a 1547 SOLD STAR-TREK PUZZIER GAMES a 953 CHANEQUE 2 DISK a 899 10 PUZZIERS a 1550 PUZZIER BALLS a 1565 SPERT BALLS a 1565 SPERT BALLS a 1765 BRAIN BALLS MANAGER GAMES a 1765 BRAIN BALLS a 1765 BRAIN BALLS a 181 BLOOD BALL a 1429 ULTI MANAGER a 1699 PREMIER PICS a 1761 AT AT A STAR A	AMICA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 202 FUNK KEYBOARDS a 202 MED V3.2 a 729 DRUM MACHINE a 788 TOSNIC DRUM KIT a 788 OCTANBED V2 a 135 THE ART OF MED a 192 THE COMPOSER a 618 MUSIC DATABASE a 981 AUDIO ENGINEER a 1268 HIPPO PLAYER a 1681 PROTRACKER 3.5 a 1791 OCTATUTOR V5 a 1971 SAMPLE MAKER CLASSIC — POP a 1029 COTTONEYE SONG a 201 PIANO CLASSICS a 234 VINALDI 2 DISK a 342 AMIGA-DEUS a 139 DIG CONCERT V2 a 620 BAGPPE MUSIC a 478 THE THIN'S DANCER a 13572 MEG DANCER a 13672 HEAVY METAL a 1800 TEKNO MAGE 96 a 1968 BEATLE MANIA 5 AMPLES — MODS a 660 KORG DIV X 3 DISK a 647 SOUND X 3 DISK 3 DISK a 660 KORG DIV X 3 DISK a 661 SOUND X 3 DISK a 661 SOUND X 3 DISK a 661 SOUND X 3 DISK	PROGRAMMERS a 288 A BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1057 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 289 SIDESHOW MAKER a 808 MAKE A DISK a 249 SIDESHOW MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK V VIRUS CONTROL a 506 A1200 VIRUS a 160 M.V. PUS AMIGA UTILITIES a 1030 A12 DIONIC TOOLS a 512 A DSK TOOL KIT a 1629 UN-ARCHIVER a 1983 CRUNCHERS 60 DISK & SYSTEM a 166 SYSTEM ESTER a 467 FILE UNDELETE a 194 DISK OPTIMISE a 156 SEGNINEERS KIT a 245 FIX DISK a 168 HARDWARE MAN-UAL a 1881 HARDWARE MODS AMIGA EDUCATION a 1881 HARDWARE MODS AMIGA EDUCATION a 1881 HARDWARE MODS AMIGA EDUCATION a 1532 MATHS 5 DISKS a 486 LANGUAGES 4 DISK
a 1642 A1200 EX RACING a 1693 BOSSCAR a 1893 BOSSCAR a 1974 TE DITOR 96/7 SIMULATORS a 332 SEALANCE-SUB a 332 SEALANCE-SUB a 333 BATTLE CARS V2 a 926 HELICOPTER a 1273 A12 TRAIN DRIVER SPORTS GAMES a 1014 CRAZY GOLF a 1017 LOS CRESANGLER a 1171 Z DK CRS-ANGLER a 1017 L DK CRS-ANGLER a	### STRATEGY GAMES ### STRATEGY	AMICA VIDEO a 329 VIDEO INSCRIPT a 799 VIDEOTRACKER 5 DISK a 148 5 - MOOVIE MUSIC MAKERS a 220 FUNK KEYBOARDS a 202 FUNK KEYBOARDS a 202 FUNK KEYBOARDS a 202 MED V3.2 729 DRUM MACHINE a 788 OCTAMED V2 a 136 THE ART OF MED a 192 THE COMPOSER a 518 MUSIC DATABASE a 981 AUDIO FIGINEER a 1268 HIPPO PLAYER a 1681 PROTRACKER 3.5 a 1791 OCTATUTOR V5 a 1971 SAMPLE MAKER CLASSIC — POP a 1029 COTTONEY SONG a 204 VIVALDI 2 DISK a 342 AMIGA-DEUS a 1373 LAGADE A 1374 METAL B 1801 SAMPLES — MODS a 1575 HEARTY METAL a 1800 TEKNO MAGE 96 a 1968 BEATLE MANIL SAMPLES — MODS a 647 SOUND FX 3 DISK a 1695 URSAN 6 SISK a 1258 MOVEL SAMPLES a 1828 NEW WORMS SFX a 1861 MONT PYTHON	PROGRAMMERS a 288 A BASIC TUTOR a 306 UNDERSTAND AMOS a 722 TONS OF AMOS a 1057 AGA DATATYPES a 1691 NORTH C a 1754 AMIGA DOS FRAU DO IT YOURSELF a 289 SIDESHOW MAKER a 808 MAKE A DISK a 249 SIDESHOW MAKER a 1154 HEDLEY GUIDE A12 a 1903 MAKE A DISK V VIRUS CONTROL a 506 A1200 VIRUS a 160 M.V. PUS AMIGA UTILITIES a 1030 A12 DIONIC TOOLS a 512 A DSK TOOL KIT a 1629 UN-ARCHIVER a 1983 CRUNCHERS 60 DISK & SYSTEM a 166 SYSTEM ESTER a 467 FILE UNDELETE a 194 DISK OPTIMISE a 156 SEGNINEERS KIT a 245 FIX DISK a 168 HARDWARE MAN-UAL a 1881 HARDWARE MODS AMIGA EDUCATION a 1881 HARDWARE MODS AMIGA EDUCATION a 1881 HARDWARE MODS AMIGA EDUCATION a 1532 MATHS 5 DISKS a 486 LANGUAGES 4 DISK

DISKS COST £1.50 EACH, NO MINIMUM ORDER, ALL VIRUS FREE AND USER FRIENDLY All Games are on 1 disk and run on all Amigas unless otherwise stated. PICK AN EXTRA DISK FOR FREE WITH EVERY EIGHT DISKS YOU PURCHASE

UNDERGROUND P.D., 54 CARMANIA CLOSE, SHOEBURYN	NESS, ESSEX SS3 9YZ. Tel: 01702 295887
Name:	Amiga Model:
Address	
	α

EGHOME

THE ESSENTIAL GUIDE TO HOME COMPUTING



OCTOBER ISSUE ON SALE NOW!

PC Home offers something for everyone; newcomers and old hands alike, families and individuals, cutting through the clutter of the PC market it provides a clear and informative guide to home computing. We aim to cover as much as possible in as much depth as possible.

SOMETHING FOR EVERYONE

In every issue you'll find:

NEWS — Whatever the latest developments — be they hardware, software or Web-based — we cover them all.

HARDWIRED — the newest hardware tested to destruction and a round up of the best products around.

GAMES — Previews and reviews of all the best (and worst) new games, with walkthroughs, hints and tips.

BUSINESS PARK — working from home? We review the software designed to make a SoHo business run smoother and more efficiently.

THE WEB — the Internet is given a comprehesive and unique going over.

EDUCATION — all the latest educational software marked out of 10 by our resident expert.

LEISURE DOME — art packages, music generators, reference programs — whatever the interest we have something to suit you.

FIRST AID — problems? We solve your troubles as well as print the latest tips and tricks to help you get the most from your machine.

PLUS...THE MEGADISK

PC Home is the only PC leisure title to carry a quality fully working product on its CD-Rom every month — without fail. In the past these have included CorelDraw! 3, Hutchinson's Encyclopedia, Comptons Encyclopedia, Multipedia, Redshift, Bodyworks, Picture Publisher, PC Paintbrush...



Available from all good newsagents or to subscribe call: 0151 357 1275

Paul Overga brings you up-to-date on a sampling package



rechnoSound urbo 2 Pro

hile other platforms seem to have almost discarded 8-bit sound sampling (or at least keep very quiet about it), like it or not the 8-bit world is still the norm for most Amiga users. One company that has been making samplers for almost as long as the Amiga has been in existence is New Dimensions, and early last year it brought out an updated 'Pro' version of its popular TechnoSound Turbo 2 sampler.

One improvement was the move to 12-bit sample processing on many internal routines. Although the main reason for the higher accuracy routines was to allow the software to be used with New Dimension's own 12-bit sampler (which is now no longer available), the extra accuracy did however reduce potential quality loss even when manipulating 8-bit samples, so overall these new enhancements were of benefit to everyone.

I should also mention that not all processing carried out by the software is being performed using 12-bit calculations. You've still got 8-bit direct to hard disk recording, and real time effects like phasing, echo, delay and the special Funtime 'novelty' effects (e.g. Pinky & Perky, Dalek and so on) are also performed in 8-bit mode because high conversion speeds are needed.

The TurboSound software itself is fairly comprehensive. As well as the main range of digitising, sample editing and manipulation functions, there's a 'ramscan' option for grabbing samples directly from memory and 'edit list' arrangements for maintaining sets of samples in memory for immediate use. There's also integral sequencer and tracker facilities and a useful Midi module which enables samples to be triggered using a Midi keyboard or external sequencer.

The package has some nice filtering routines



New Dimension's 8-bit sampling cartridge



TechnoSound Turbo's software has undergone various improvements over the years

and a facility for editing individual channels. Digital filtering essentially means applying certain mathematical transformations to the digitised waveform - you can, for example, use a low pass filter effect to remove unwanted hiss from a sample. TechnoSound Turbo can apply low pass, high pass and band pass filtering using either the Butterworth or Chebyshev filter equations. You can view frequency response graphs that show predicted amplitude attenuation and even get a display called a Z-Transfer plot.

Now all (this unless you are actively involved in the world of digital signal processing techniques) is likely to sound a little high powered (the theory behind it certainly is). The best thing to do is just let your ears be the judge, remembering that it's far better to concentrate on getting a good quality sample in the first place than to rely on digital filtering to improve things. Having said that, there's no doubt at all that TechnoSound's filter and realtime effects are good fun to experiment with!

ON THE LINE

Despite the fact that nowadays the TechnoSound Turbo Pro 2 software is only ever bundled with 8bit hardware, this makes an excellent basis for conventional 8-bit sampling. Talking of hardware, one alternative to the TechnoSound offering is of course HiSoft's Aura sound sampler. Make no mistake, this package is good (very good) but not everyone is able to take advantage of this because the Aura hardware requires a PCMCIA slot. In short, this effectively means that the Aura option is only available to A600/A1200 owners and users of other Amigas must follow different pathways.

It's also worth remembering that anyone with earlier versions of the TechnoSound Turbo sampler can, for a modest fee, still upgrade their software and this is clearly a worthwhile option.

Let's face it, despite the 16-bit or nothing 'hype', for many purposes 8-bit sampling is perfectly adequate and samples are inherently smaller in size than their grown up 16-bit relations. Of course when you combine hardware such as is provided with the TechnoSound package with other music software (such as the OctaMED Sound Studio), then the door really opens. Time and time again musicians have shown that combinations like this can enable you to produce tracker modules second to none.



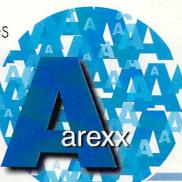
Product TechnoSound Turbo 2 Pro Supplier New Dimensions TT2 Pro software Price with 8-bit hardware £39.99 Software upgrade for existing TechnoSound Turbo users £10 01291 690901

CORES

80%
90%
80%
80%

AMIGA COMPUTING OCTOBER 1997

Paul Overaa makes a start explaining how to create and use random access files



Random ccess Files

ast month I outlined the use of ARexx's Seek() function and mentioned that it could be used to provide the basis of a number of sophisticated file access mechanisms. I also mentioned that there were plans to show how the function could be used to parse file structures. However, having thought more about this, I decided that for starters we really ought to deal with conventional random access file handling first.

Random access files are based on the use of fixed length records containing fields whose position and size within each record is also fixed. You might, for example, chose to set up a data file consisting of records set up like this...

field names: sizes (bytes) 10 10

There are two approaches to building such records. Firstly, you could use Seek() to address each field of a given record individually - thus storing each field of the record as a separate operation. The disadvantage here is that many seeking and writing operations may be needed to write each record (if there are many fields). The alternative approach (and the one usually adopted is to build up the complete record) is to make one Seek() operation, and store the whole record in one go.

Now it's fairly obvious, in the latter case, that data items collected must be padded to the right length in order to make the resulting record size right. ARexx's Left() function comes in handy here and if the variable 'surname' for example needs to be brought to a length of 20 characters by padding with blanks, this expression will do the job:

surname=surname||Left(surname,20,BLANK)

BLANK, incidentally, is a pseudo constant set up using the expression BLANK=" ' in order to make the code easier to read!

InitialiseMain: Procedure arg filename, record, record_count if Open(main,filename,'w') then do i=1 to record_count call WriteRecord(main, record, i-1) end Close(main) end

Lisitng 1: The Initialise Main() procedure used by Setup.rexx

Rather than embed specific field name definitions within the example scripts I've opted for the more versatile approach of producing a separate program that can create blank record random access files of any chosen type.

This month's code, a program called Setup.rexx (which you'll find on the cover disk), does exactly this. It starts by asking you for a filename and the number of fields that will be present in each record. Having got that information it opens a separate 'header' file (a file of the name you supplied but with a .hdr name extension) and writes a field count, the name and sizes of the fields you supply, and the number of initialised records written to the file.

Once the header file has been created and closed a call is made to an InitialiseMain() routine (see listing 1). This attempts to open and initialise the main data file that will hold the random access records. Initialisation is very straightforward with blank record fields being created using:

record=record||Left('',field_size,BLANK)

As each field is defined an appropriate number of blanks get added to the record definition. There are simpler ways of setting records to all blanks but this approach is more generally useful since, where necessary, it may be used to initialise each field within the record with different 'empty marker' values.

Providing the specified file is successfully opened, the initialisation code uses a loop to locate the position of each record and store the initial blank records in the file. The routine that actually handles the record writing is called WriteRecord() and it looks like this:

WriteRecord: Procedure arg main, record, position call Seek(main, (position*Length(record),'B') call Writech(main, record) return

Notice how the byte position of a given record within a file is calculated. We multiply the record number by the length of a complete record. For this to work we need to adopt the convention that the first record in the file is record 0, the next record one and so on. For normal purposes users like to regard record one as the first record in a file so it is necessary to subtract one from any user-oriented record numbers supplied to the above routine. That's where the i-1 comes from within the inner do-end loop of listing 1!

OVER TO YOU!

Take a look at the script on the disk, try running it (using the rx command) at a Shell window and look at the sizes and contents of the files produced. Confirm they represent the right sizes for the record definitions you supply. (I should mention at this stage that the example code has been deliberately kept free from error checking code in order to allow the main framework to be easily seen.) It works but for any long term serious use, error checking of supplied fields would obviously be advisable.

Try using the setup.rexx program with your own file definitions then look at the created files

Neil Mohr has some horrible flashbacks to his school days



Learn your tables boy

ight, tables. These are one early addition to the HTML standard that was desperately needed. With a little bit of planning you can get quite complex layouts that would be otherwise unattainable using the normal HTML tags available.

A table allows you to define a rectangular space in an HTML document. This space can be split into any number of rows, which themselves can have any number of cells held in them. It is in these cells that you can place text and pictures. The easiest way of think about tables is as a grid, and each cell can contains text or pictures.

Before I describe the various tags associated with tables I should say that the way you go about creating tables is very important. Once you have started, you define the table on a row for row basis. That is, you start your first row, say what cells you want in it, then go on to the next row.

```
<TABLE
WIOTH = "pixles|percentage"
BORDER = "..."
CELLSPACING = value
CELLPADDING = value
CELLPADDING = value
CLEAR = left|right|all
BGCOLOR = value
NOWRAP>
<CAPTION></CAPTION>
<TR>></TR>
```

Quickly looking at the table attributes -

WIDTH allows you to say how wide the table should be in either pixels or a percentage of the browser window. Most people only use a 640 wide window, so you could constrain table to, say, 600 pixels wide.

Cellspacing and cellpadding allows you say how many pixels should be left blank between cells and around the cell's contents. CLEAR stops text flowing around the table. Only one caption tag is allowed within a table.

A new table is defined by using the <TABLE> tag, the end of the table is shown with the close tag </TABLE> the table definition has to be contained within these two tags. To add a new row to the current table, use the <TR> table row tag, within this you can add as many <TD> table data cells as you like. These two tags do have corresponding close tags, but generally browsers automatically assume them closed when they come upon another occurrence of the same tag. So when a browser comes across a second <TD> tag, the first is closed. Quick example:

This creates a small table with three cells in it, one on top and two bellow. The browser will automatically size the table – to precisely fill the cells. This is how the generic table works. Creat-

ing tables like this is a good way of testing them before you add the clutter of image and text tags.

So, as you can see, basic table use is simple. It allows you to place graphics and text a little more neatly on screen, and of course using the <P ALIGN= ... > tag you position it on screen to some extent.

To make tables more flexible in how they lay out the cells, a number of attributes are provided in the <TD> tag.

```
<TD
NOWRAP
ROWSPAN = value
COLSPAN = value
ALIGN = left|right|center
VALIGN = top|center|bottom
WIOTH = pixels|percentage
BGCOLOR = value>
body text
</TD>
```

Straightforward tags such as VALIGN and ALIGN allow you to force cell contents to middle or sides of a cell. Again, with width, you can try to force the browser to restrict the size of individual cells, but this may not always be possible. BGCOLOR lets you specify a value such as #fffffff, for white, and so colour individual cells.

This leaves ROWSPAN and COLSPAN – two very useful attributes that allow you to break up the otherwise grid like layout. One example would be if you inserted COLSPAN = 2 into the first <TD> tag in the previous example. This makes that cell spread across the top of the other two

ROWSPAN is a little more tricky as you have to make sure your following HTML corresponds to the number of rows you have stated. This allows you to create a column in a table – great for running blocks of text down your page.

Again, adjusting the last example, change the COLSPAN to ROWSPAN and make it equal 3, and insert a <TR> between the <TD>Cell 2 and next <TD> tag. Reload the page and you will see the first cell runs down the left side. (By the way setting ROWSPAN or COLSPAN to zero means span all rows or cells.)

Oh dear, it seems I've run out of space and out of issues, for good use of tables check out the AC Web site at www.idg.co.uk/amigacomp/ The index page is fairly complex and the ACAS page adds margins that look better.

NEED MY OWN SPACE, MAN

Just before I go for good I think it is worth mentioning one little technique that I have come across a few times on my travels around the Web. Commonly known as the single pixel GIF 'thing' it gives you a way to get more accurate layout outs, well essentially pixel perfect layout.

Before you can start you need to create your self a transparent single pixel GIF image, either Personal Paint or Photogenics 2 should do the trick. So what use is that you may be asking yourself, well using this in conjunction with the IMG tag's WIDTH, HEIGHT or HSPACE and VSPACE attributes you can space to your Web site or white space as it is know in the Publishing industry.

So how do you use this then, well say you want to run a margin down the side of some text, all you would do is at the start of the text insert the line:

Now there are a couple of things to consider here, firstly AWeb does not support image scaling, so in AWeb this would not work. So the alternative would be to use the spacing attributes which would look like this:

Remember that the space adds the same amount to either side, so only half the number of pixels need to be used. Again this will work in AWeb and iBrowse but not in Voyager, but really it is the more correct way of using this technique, how hum, I sure this will added soon.

Paul Overaa uses Electronic Arts' cmpByteRun 1 compression to provide a few tips



Function Conversion

had an e-mail from a guy called lan Howle a few weeks ago who, though heavily into 680x0 coding, was having problems displaying IFF pictures. The data in these files is normally compressed using a technique called cmpByteRun1 compression and the difficulties related to the decompressing of ILBM body chunk data prior to jamming the resultant graphics bytes into a screen's bitplanes. In short, some 680x0 code was needed to handle the decompression work.

The standard way of doing this is to use a routine called unpackrow() which was placed in the public domain by Electronic Arts. Like many coders, I wrote my own decompression routine in the early days in order to make sure that I really understood how the cmpByteRun1 scheme worked and, once I had written it, have tended to use it in place of the standard code. My version was written in C and it was only when the above query cropped up that I sat down and produced a 680x0 version.

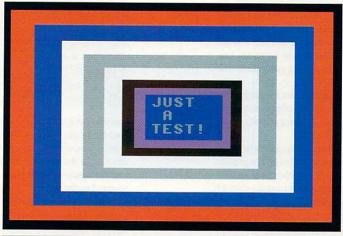
The translation of a C routine into a 680x0 equivalent is not usually that difficult. The most important thing, as you might expect, is to have a detailed understanding of what the C code is doing. Luckily the algorithm for the decompression in this case is simple: You read through the IFF body chunk data looking at each byte treating them as "signed" numbers.

If, while reading the source info, you find a value between 0 and 127 you then read and copy one more than that number of subsequent bytes to the chosen destination. Reading a value of 10 therefore means you copy the next eleven bytes of the source (i.e. the body chunk) to the destination (a bitplane).

If, on the other hand, the byte read is negative you do one of two things: If the value lies between -1 and -127, instead of copying bytes you disregard the sign and duplicate the next byte that many times plus one. Values of -128 are even easier to

```
do
get byte n
if n >= 0 {
increment n and update current row length
copy (n+1) bytes
}
else {
if n!=-128 {
negate n, increment n and update current row length duplicate
(n+1) bytes
}
}
}
while(condition);
update original pointer values
```

Listing 1: Basic framework of the C code (excluding error handling)



Here's the little test program used to check the 680x0 routine!

deal with because you simply ignore them!

The normal reason for producing a 680x0-based version of a C routine is either to gain additional speed or to allow for easier use in assembly language programs. That said, whenever I do any of these translations I always code it initially as though the routine will be used from C. Why? – because in most cases this enables any new equivalent 680x0 version to be tested using the same program that the routine was taken from. You simply comment out or delete the C routine (keeping the function prototype of course) and instead link your C code with the object code produced by the assembler.

If, for simplicity, we ignore the problems of error handling (which involves checking to see that oversized screen display rows are not produced) then the basic framework of the routine in C-ish pseudocode is that shown in listing 1. Creating a 680x0 version just requires us to produce the same overall structure – you can see how I've done this in listing 2. Once this plan is available translation becomes simply a matter of hanging suitable code onto each of the sections and you'll be able to get these details from the coverdisk example code.

I've also put my C version of the cmpByteRun1 unpacking routine, UnPackRow.c, on disk and you'll see that it has this function prototype:

BOOL error=UnPackRow(BYTE **source_p, BYTE
**dest_p, WORD rowSize)

Notice that the first two parameters are 'pointers to pointers' – in other words this routine expects to be passed the addresses of the source and desti-

nation pointers. The reason is that the routine needs to modify and update the source and destination pointers each time it is called and it can only do this if it knows whereabouts in memory those pointers are kept.

For the parameter passing incidentally, I've opted for the conventional stack-based approach and you'll find that the new 680x0 version collects the source, destination, and rowsize parameters in a0, a1 and d0 in this fashion:

_UnPackRow move.l 4(a7),a0 move.l 8(a7),a1 move.w 12(a7),d0

The reason for the 4, 8,12 offsets is that C parameters are pushed onto the stack in right to left order so we end up with the word-sized 'rowsize' parameter lying furthest away from the return address.

And that's pretty much all there is to it. Once the routine was complete I assembled and linked it into a C program for testing, and the job was finished. Needless to say plenty of byte-saving could now be done but for me the time for doing such things is always after the routine has been written and tested. During the initial writing period the only consideration I'm interested in, and you'll see this from the example code, is keeping the structure and purpose of the code clearly visible!

do_while_loop: move.b (a2)+,d1
d1=original 'n' variable
cmp.b #0,d1
blt.s n_less_than branch if n

Listing 2

Paul Overaa provides some notes on Intuition Image drawing



Displaying Pictures

nce the C newcomer has reached the point where he can open an Intuition window and identify IntuiMessages, chances are that the next objective will be to learn how to draw things on the screen. Intuition's arrangements for drawing graphics into multiple-bitplane displays are, in terms of the underlying ideas, rather complex but luckily there is a pre-written library routine called DrawImage(), which makes the job of displaying graphics a piece of cake.

DrawImage() requires graphics data to be described using something called an Image structure, but even this is not a problem because there are various utilities that can convert standard IFF pictures and brushes directly into these structures. Morten Eriksen's Shareware PicCon program is particularly useful, as is the BrushCon utility written by Ken Howe (which can be freely distributed).

Once this conversion operation has been done the Image structure is ready for use either by reading this graphics data directly into the source code of the program or by specifying the file holding the structure as a header file to be included during compilation.

You'll find the details of the Drawlmage() routine and the Intuition Image structure definition in the accompanying box outs. To begin with, you will rarely need to worry about the internal structure details because the required data will be generated by the IFFImage conversion program. What you do need to know, however, is how to set up the parameters needed for the Drawlmage() call.

POINTERS

Pointers (variables which hold addresses), and especially pointers to system structures, appear frequently in Amiga code and the Drawlmage() statement that you'll find in the example source, Drawlmage(window_p->RPort, &test_image,8,15), is no exception.

The first parameter is a pointer to the window's rastport (drawing area) and you will have already



Image drawing courtesy of Intuition's DrawImage() routine

```
function: DrawImage()

Description: This is Intuition's high-level Image drawing routine

Call Format: DrawImage(rastport_p, image_p, left_offset, top_offset);

Arguments: rastport_p pointer to a RastPort

image_p pointer to an Image structure

left_offset a general left offset which will be used with all of the inked Image structures of a particular DrawImage() call.

top_offset a general top offset which will be used with all of the linked Image structures of a particular DrawImage() call.

Return Value: None
```

seen how this is obtained in previous examples that used the intuition library's PrintlText() function. In short, if window_p is the address of a Window structure (i.e. the software entity that represents the Intuition window that physically appears on the screen) then the address of the associated rastPort for that window will be given by the expression:

window_p->RPort.

For the second parameter, &test_image, I've simply used C's address-of (&) operator to specify the address of a statically defined Image structure. For example purposes a brush was created and saved using DPaint (and as you'll see I'm no artist), then BrushCon was used to convert it to an image held in a separate header file called test_image.h. All that was needed was a preprocessor #include statement

```
#include "test_image.h"
```

near the start of the main program source to specify that this extra file be read in and used during compilation.

As always, you'll find a runable example and all associated source code on the coverdisk. The bulk of the code follows the same arrangements as ear-

lier examples and in fact the event handling loop is actually simpler than last month's offering because we are only detecting the use of the window's close gadget.

This month, incidentally, I've also included Ken Howe's BrushCon utility on disk so you can try replacing my test image with one of your own. Just create a similarly sized brush (or modify the window size details in the example's OpenWindow-Tags() function call to produce a window of a suitable size for the image you wish to display), and then convert that brush to an image structure called test_image naming the file test_image.h. Having done that, recompile the example and your new graphic will appear when the program is run.

Graphics data, such as is found in an Image structure, needs to be held in chip memory and from C this is normally indicated to the compiler by using a keyword such as chip or __chip in the image data definition. Not all compilers are the same (although DICE, Storm C and SAS C all recognise __chip) and so, depending on the compiler you are using, you'll probably need to manually edit the image definition file that BrushCon creates and insert a couple of underscore characters in front of the 'chip' keyword that you'll find. Other than that, everything should be plain sailing.

The Intuition Image structure: LeftEdge and TopEdge are offsets from the top left of the display element. The Width and Height fields indicate the size of the image and Depth tells the system how many bitplanes are in use. PlanePick identifies the planes in the real display which have been picked to receive the defined image data, and PlaneOnOff tells the system what to do with those planes that are not picked. NextImage is a pointer which allows any number of Image structures to be linked together and displayed with a single call to the Intuition DrawImage() routine.



And now, the time has come, to face the final curtain...
Yes it's the end of the road my friends. As TinkyWink would say, "Bye bye"



FUTURE RELEASES

Although we're not going to be around to write about them, there are some excellent games coming along in the next few weeks. Imminent releases include Myst which is set to be released by ClickBOOM on the Amiga after proving to be a great success on the

Mac and PC. Expect its arrival in a few weeks.

Likewise, Epic is planning on bringing out Flyin' High any time soon. The fast and

furious arcade racer will be on CD-Rom and floppy disk and should be available for order within about a month.

Oxyron has penned in a release date sometime in September for its latest project, the stunning looking Doom clone, Trapped 2 and German games developers Titan Software hope to release the futuristic flight si, Shadow of the Third Moon at about the same time.

Amiga Action may be out for the count but there is still plenty of quality software on the way so you'd better start saving your pennie....



TANK GOBLINS



Back in April we brought you news of Macclesfield developer Pandemonium and its new 3-D tank combat game, Machines of the Wastelands. Now, after months of coding and hundreds of cans of Cola and dial-a-pizzas, the game is ready.

Set on a desolate planet where tribes of Goblins fight each other

for their world's last resources, the game involves directing a tank about a bar-

ren desert blowing up everything you lay eyes on.

It also involves an element of business as well – if you don't pay your crew enough, they will leave your employ. A novel gambling feature allows you to recruit crew for almost no cash if your lucky number comes up.

The game as yet doesn't have a publisher but anybody interested in finding out more about Goblin Tanks should phone: 0161 485 5231



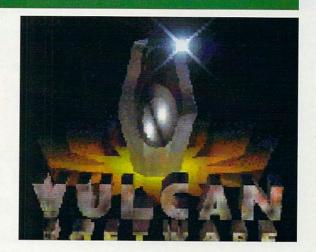
VULCAN 3D PLAYER

Vulcan Software has announced it is to release a game creation tool capable of creating true 3-D environments. The utility, the Vulcan 3D Player, will allow the user to create game environments with 360 degree rotation and up and down movements. Corridors, tunnels and crevasses can be built, windows and ledges positioned, and the walls and floors given surface textures.

Objects such as barrels, tables, drinks machines and crates can be added and enemies positioned. Enemies can be chosen from the default characters supplied, or you can create your own. Intelligence levels can also be determined.

Vulcan hopes that its tool will be used by Amiga aficionados to create their own Doom clones, with the finished results being posted on Aminet. Hopefully, custom created games and levels will become as widespread and well used as the custom Marathon and Quake levels currently available on the

Fingers crossed that there won't be any problems with compatibility - the utility also supports AGA and 90 per cent of all known graphics cards. For more information contact Vulcan at: -http://www.vulcan.co.uk/



ALHALLA

Vulcan Software has announced that it is to continue the successful Valhalla series. Valhalla 5 will be CD-Rom based and will contain over 50 interactive characters and a vocabulary of 10,000 words.

There will apparently be four huge levels each with its own redefined visual screen with cinematic graphics. As with most Vulcan games, Valahalla 5 will be available in English, German, Italian, Spanish, Swedish, Norwegian, Finnish, Dutch and Danish.

ULSTAR

A team of developers calling itself **Fullspeed Creative** Developments has just finished writing an old school style platform arcade blaster. Bearing something of a resemblance to the classic R-Type, Pulstar requires you to fly a starfighter through many different stages on various planets.



Game bosses are the order of the day here with some being so huge they don't fit onto the screen. Luckily you'll have the required firepower to defeat these giant sized bad guys - Fullspeed Creative Developments say that there game includes the biggest weapon system ever!

Apparently the game will be released on CD with animated movie sequences, hundreds of levels and music direct from CD (16 Bit).

Check out the Web site at:- http://home.tonline.de/home/fullspeed/



BUYOUT

The two biggest Amiga licenceware companies in the UK have decided to combine their efforts to support the Amiga. After five weeks of negotiations, 5th Dimension has decided to buy out F1 Licenceware.

The buyout will result in the establishment of a new Amiga based licenceware company, F1 Software, which will be based in Goldthorpe, South Yorkshire. The two companies' product ranges will, for the moment be kept separate, but will total over 200 in number. As well as classic games and utilities, new products are under development.

The company will remain 100 per cent Amiga dedicated and intends to work on developing the American side of its opera-

For more details visit F1 Software's page at: http://www.ware5d.demon.co.uk

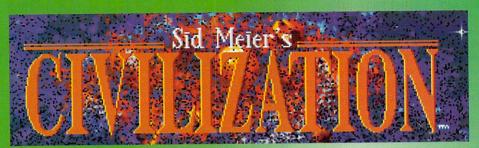
DIOS MY Amigos

Yup, I guess you know by now that this is our last magazine. I've been working here for nearly a year now and have witnessed the Amiga story change from one of woe to

Amiga has got a rich and powerful owner and people all over the world seem to be coding some impressive games. BlackBlade is set to blow our socks off, Alive is set to release some of the best games in recent years and Vulcan is continuing to churn out quality game after quality game.

We won't be here any longer but, believe me, the future's looking bright. Anyway, so long everybody and thank you for buying the mag...

STRATEGY



He's got the whole world in his hands... **Hugh Poynton plays God for a day**

Some God games let you run a city, some a business empire, some even let you dictate the fortunes of a country. Sid Meier's Civilization lets you run an entire race.

The simple aim of the game is to guide your chosen people through millennia of human history. It starts 6000 years ago when the world's first cities were established and you must guide your people through times of hardship, deciding whether or not to make war or peace with your neighbours, where to establish trade and strive to invent technologies that will give your race the edge. The game only ends when you send your people off to colonise the stars.

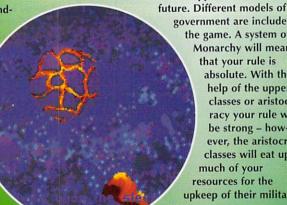
The decisions to make are endless - will your civilisation be a ruthless, totalitarian bully state that conquers and plunders to gain valuable resources? Or will your people be peaceful, achieving the lead by trade and scientific research?

Everything has been thought out in painstaking detail. Technological advancements and progress are all dependent on the smallest things. Thousands of years ago the Mongol empire became one of the largest and most successful warrior civilisations because of its invention of the stirrup and hence the ability not just to ride a horse but to fight from it. The same goes for Civilization, master the art of horseback riding and you'll be given a golden opportunity to get one over on other civilisations. Likewise mastering other practices and technologies will transform your people from a primitive tribe to a prosperous empire, to (if you play your cards right) a space faring people.

The way you govern your tribe will influence what happens to it in the

> government are included in the game. A system of Monarchy will mean that your rule is absolute. With the help of the upper classes or aristocracy your rule will be strong - however, the aristocratic classes will eat up much of your resources for the upkeep of their military

> > ENE





Emperor Hugh and his fledgling tribe - The Bobbins of Russia



Oh no! Deposed



Some useful info screens keep you well informed

units.

Just as past kings of England have found out, the aristocracy can be your greatest weapon and your worst enemy. Communism will cut down drastically on corruption but have a detrimental effect on trade. Run a republic and trade will boom, but senates can override any decision you may want to take. In a democracy the economic growth is very high, allowing you to plough resources into scientific research and improving the standard of living, but you must keep the populace happy or risk a revolution. It's all a valuable lesson in politics and a damn sight easier than reading Machiavelli's "The Prince".

Civilization is the God game. It'll take you months to master and you're going to have to wrap your head around some weighty concepts, but it'll be worth it. Other games require you to learn reams of stuff about fictional races and planets. Try your own, you might like it.

THE LOW-DOWN

PUBLISHER Guildhall **DEVELOPER** Microprose **CONTACT 01302 890000 PRICE** £14.99 DISKS 1CD

GRAPHICS	80%
SOUND	86%
PLAYABILITY	94%
DIFFICULTY	Hard

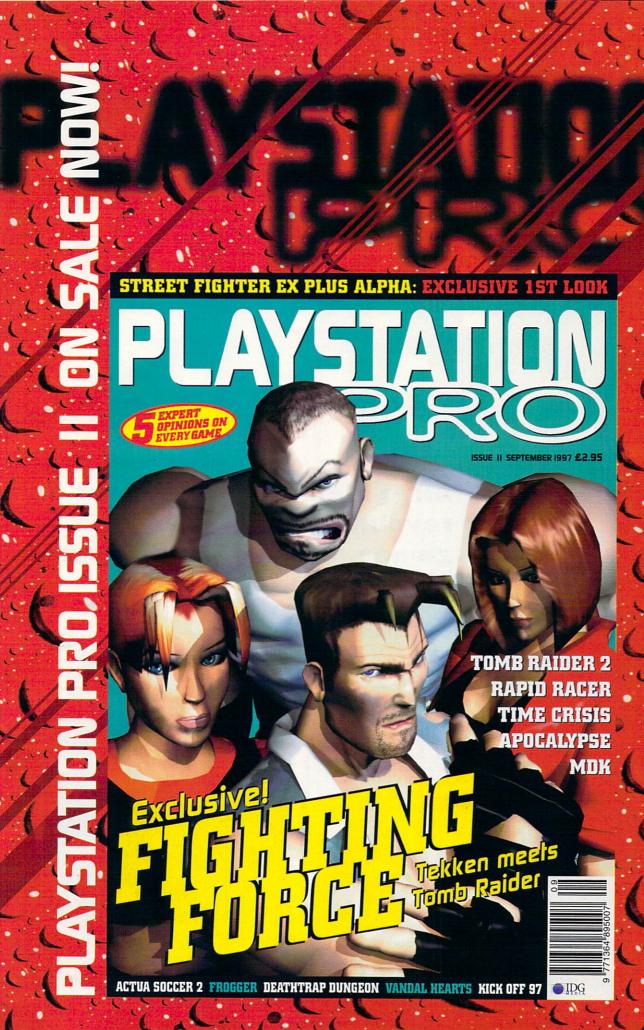
OVERALL SCORE

CITY RESOURCES

FOOD STORAGE

W

DOMESTIC ADVISOR: WE SHOULD BUILD A BARRACI TO DRODUCE VETERAN UNITS



INTERVIEW

As I walked into the north-east London Pub where I was to interview Alive MediaSoft, the first thing that struck me was that they all had a look of eager anticipation that made them look like kids on Christmas Eve.

That isn't much of a surprise when you consider what the future holds for Alive MediaSoft. The brainchild of two die hard Amiga enthusiasts, Andy Reed and Stephen



Alive MediaSoft looks set to revolutionise the Amiga games market - Hugh Poynton investigates

Flowers, the new Amiga games company looks set to revolutionise the Amiga games scene in the next few months.

It is called Alive because of Andy's frustration at the endless stream of "the end is nigh, the Amiga is dead" articles appearing in the Amiga press. The company has a

tremendous card up its sleeve - a new CD-based Macintosh emulator which allows you to play Mac games on the Amiga without having to ever see the Mac OS, programming the joystick or leeching speed from the game.

With other Mac emulators for the Amiga you need to create a separate file that works like a hard drive on which to install all the Mac info and then you need the latest system software and install it. Rather a lot of work just to play a game. Alive will sell Mac games with a special

emulator disk - all you'll have to do is click the game icon, and you'll be in. Everything has been designed to make the process as easy as possible. "It's designed for people who have never used an Amiga. We've made it as easy as we possibly can" says Andy.

"We have been talking to the various



companies who produced the original games and copyright isn't as much of a problem as you'd at first think. Because no code has been altered, and the CDs and CD packaging hasn't been changed, all Alive is doing in effect is buying the CD and selling it on", says Andy. Alive is, in effect, just planning to wrap the CDs in shrink wrap plastic that will have "For the Amiga" on. It's all totally legal and done with the original publishers', whether it be Sierra or LucasArts, full consent.

The beauty of the Mac emulator is, providing permission is granted by the various publishers, a huge wealth of games can now be released onto the Amiga. As long as the initial reaction to these Mac releases is good, Alive hopes to be able to bring out a new Mac game every month.

The company has a huge stack of games waiting for a release and eventually plans a release strategy unlike anything any other software company has ever attempted. Steve says, "We're going to put out a wish-list saying, look we have these games, what do you want? We are not going to release something that people are not going to buy. We will just that say we're willing to do these games, which do you want? If you want, say, X-Wing next month, you'll have X-Wing next month."

Alive, however, isn't just going to bring out Mac games. In addition to the excellent looking Haunted, it has got reams and reams of storyboards and ideas for its own games. It is also eager to sign any new developers for the platform - with the wealth of talented Amiga programmers about at the moment, they should have no difficulty. "The emulator will get us established," says Andy, "once we're established we can take on developers and publish their games. We've also got



loads of games ideas ourselves, we'd



ACTION FEATURE INTERVIEW

ware out there and, when you think about it, 70 per cent of people want to play games." says Andy.

Whether by design or by accident, Alive seems to have chosen the best possible time to start up. As the Amiga games market starts to shake itself awake after a couple of years in a coma, any decent Amiga game will make a killing.

Andy is excited about the rejuvenation of the market – rather than being concerned about his competitors games titles, he is excited. "The games will stimulate the market, get more people buying. At the moment we have Vulcan's new game, we have Epic's new game title and Sadness have got its new game...we have this little wave at the moment, but hopefully it'll become a big tidal wave – we want to be on the surfboard so we can catch that wave."

Which it undoubtedly will – Haunted looks set to be one of the best adventure games produced in years, with real-time rendered animated cinema sequences and proper FMV sequences. Like other recent Amiga games, the quality of Haunted actually exceeds that of many PC games.

Why has there been a sort of renaissance in Amiga games and why are we seeing a profusion of excellent quality games such as Shadow of the Third Moon? Andy believes that new titles are looking so good simply because they actually realise the full potential of the Amiga. In the past, the potential was never realised simply due to laziness.

"The were so many big publishers out there that had a perfectly good A500 game engine, when the A1200 came out they just



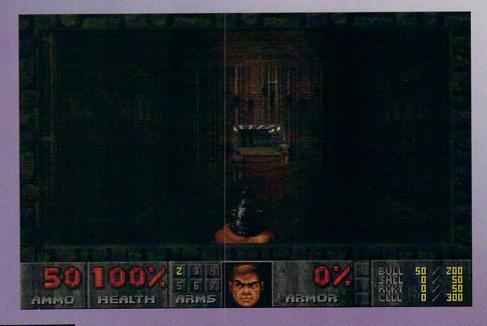
ported it over. Team 17 came along and brought out Alien Breed 3D and proved all the critics wrong with a decent Doom clone. Now you can't just rest on your laurels like a lot of the big publishers did. You've got to really sell yourself. You can now use the Amiga to its full capacity, what with all the accelerator cards and graphics cards. It's now running in the red limit zone. In the past it was just ticking along at a 1000 revs."

Alive is adamant it will not fall into the trap other Amiga games manufactures have. It shares Vulcan boss Paul Carrington's belief that the future for the Amiga is to update and that its games must reflect this. "Our games will be CD based, they will support PPC," says Steve. When pushed as to whether Alive will bring out any PPC only games,

Andy says, "We've heard so many rumours about PPC, Amiga International is umming and ahhing as to whether or not to go PPC. We are making all of them both 68k and PPC. If PPC is the Amiga, then we will be PPC."

So, is breaking into the Amiga games market an intimidating experience? Far from it apparently – it seems as though Alive's reception into the Amiga games market has been a thoroughly pleasant experience. Andy and Steve have nothing but praise for just about anybody they've dealt with while setting up the company. Team 17's Andy Davidson in particular. "Team 17 was brilliant, Andy said he'd give me any help with Lightwave, if I needed any tutorials, videos or anything to do with Amiga" says Steve.

Likewise, Vulcan Software couldn't have been more helpful. Paul Carrington has offered the company advice and practical help – even down to offering to burn CDs for them. This friendliness isn't just Amiga enthusiasts helping each other out, it also



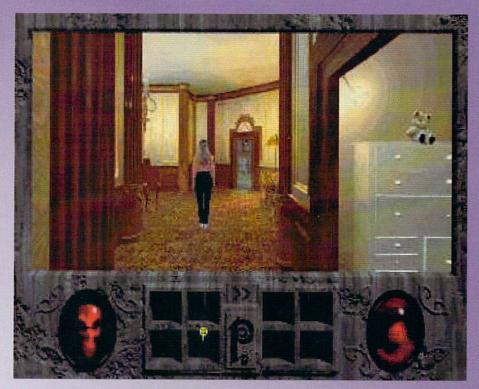


makes good business sense. "Everybody is willing to help everybody, because if there is no Amiga games market then everybody goes out of business" says Andy. Companies such as Vulcan want and need the competition.

Talking to Andy, Steve and the rest of the Alive crew, you get the feeling that the Amiga, and the Amiga games market, is set for quite a revival. Providing of course, Gateway and Amiga International play their cards right.

Although Alive is confident about the Amiga's future there is an awareness that things have got to be done right this time. "It's encouraging that the Amiga has an owner," says Andy about the Gateway buyout, "but this is the third time the company has been bought and I think It'll probably be the last, if something doesn't happen now, they won't have another shot."

So what would be Alive's dream machine then? "We would both like to see both a big graphics machine, and also something that's smaller and cheaper than the average PC in Dixons that would attract mum and dad out buying a computer for Christmas. I'd like to see a £600 base machine, with an 030 mini-





mum, CD-Rom and plenty of expandability -4Mb only costs about £15 now. A base computer with a little HD and 10Mb of Ram would be perfect.'

Although it's still early days yet, Alive has a catalogue of games and a commercial battle plan that would make other, bigger software companies go green with envy. But they've got another hidden ingredient that more or less assures them success. "We will never give up" declares Steve. "We are passionate about the Amiga to the point of being obsessive, as long as there are people out there with an Amiga, we'll write games for them."

As I make my goodbyes and prepare to get the tube home, I can't shake the feeling that I'm going to hear a hell of a lot more about these guys and all of it's going to be good.

So what has Alive got to offer in the next few months? We take a look:

Phatasmagoria

Phatasmagoria will be one of Alive's first releases. Squeezed onto a monster 7 CDs, the game will require a minimum of an 030 processor, quad speed CD-Rom, 8 Mb Ram and 15 Mb of hard disk space.

Doom

ID's legendary multiplayer shoot 'em-up will be playable with four times the screen resolution of the PC and 30 rock hard levels. You'll need an 030 accelerator, quad speed CD-Rom and 8 Mb of Ram.

Haunted

Alive's 'baby', this game will use FMV, blue screen filming, and real-time rendered animated sequences. For this you'll need an 030 accelerator, quad speed CD-ROM and 8 Mb of Ram.

PROGRESS

We take a look at BlackBlade's long awaited futuristic flight sim

A few months ago, a Web site appeared belonging to a group of Italian coders calling itself BlackBlade. The Web site featured a series of screenshots that looked far too good to be true. Smoke trails, sleek, dangerous jets swooping down beautiful voxel modelled valleys. To quote Chris Evans, I thought, "Never gonna happen, never gonna happen".

The months wore on and eventually we managed to get hold of a beta test version of the game. Being a cynical sod, I never though Shadow of the Third Moon would live up to the hype. I was convinced the thing wouldn't work and if it did it wouldn't be worth the code it was written with. The front end looked nice, very nice and was accompanied by some crisp clear slightly ambient dance music. That still didn't prove anything. I needed to actually play the

Believe me, it does live up to the hype. In its final finished form this game will be the finest on the Amiga - even in its beta test version it beats most hands down.

The graphics are stunning. They remind me of those computer generations you used to see on telly a few years back where they got photos and information from satellites and maps and then pieced the data together to create a 3-D representation of say, Mount Olympus Moons on Mars or the San Fran-.

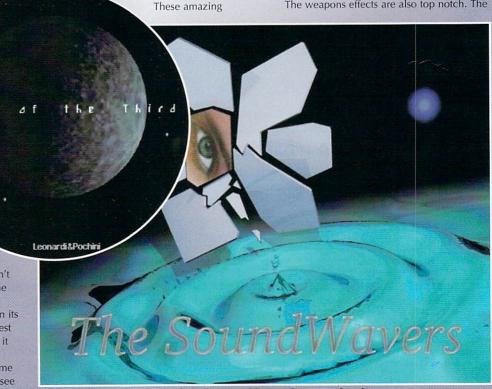
cisco Bay Area.

graphics are created using a tool designed specifically for the game, BlackBlade's 3DTIS (Terrain Imaging System). This has allowed the BlackBlade designers to draw realistic landscapes with much higher definition than classic, chunky, A500-like vectorial graphics you see on a lot of flight sims.

The Voxel rendering allows beautiful valleys, peaks and lakes to be created with fantastic attention to detail. A lake isn't just blue, it's textured with white along the water's edge to represent the water lapping the shores of the

The valleys and mountain peaks look just as realistic. Fly down a valley at top speed and it gives an impression of speed I haven't seen in other games. Other details that really grab your attention are things like the semi-transparent smoke that trails from a rocket or a damaged fighter or the photo-realistic sky.

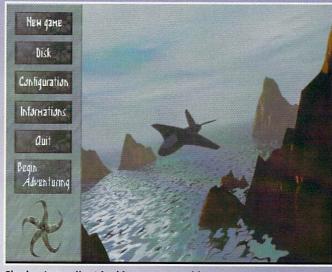
The weapons effects are also top notch. The



The SoundWavers, creators of Shadow's ambient techno soundtrack



You've quite an stock of weapons with which to load up your fighter



Shadow's excellent looking menu combines simplicity and some excellent graphics

closest comparison I could make with other games would be Terminal Velocity mixed with Comanche and a liberal dose of X-Wing for

good measure. the tunes aren't bad at all. Soundwise, you can't fault it. Obviously this is only an early version so not all the sound effects are in place just yet, but those I've heard so far bode well for the game. Unleash a rocket and with no aerial opposition. you'll hear the roar as it streaks towards its target. Blow up an oil tank and you'll hear a huge, resounding boom. A la Wipe-Out and games of that ilk, your chaos wreaking will be accompanied with dance music. Unfortunately there's no 31,378 Leftfield or Under-

An example of what can be done with BlackBlade's 3DTIS

world here, but the coders who've done the music are still pretty skilled. Despite them something of a duff name (The SoundWavers),

The game looks the bees knees at the moment but, as it is still a beta test version, there is only one mission and that is against a ground based target

> This is fine for checking out the graphics, the various weapons and the control systems of the plane but it only hints at the game's full potential. This game could be immense. The long valleys and towering peaks would be absolutely ideal for

aerial battles - you'd have to take into consideration loads more tactics than the average flight sim because, in addition to belting along at a furious speed, your vehicle can hover and even fly backwards. You could have games where you hover behind a peak and pop up to take out the enemy.

Surprisingly the game isn't that system hungry. Although you will get the best results on a very high speed machine, the version we got our grubby mitts



...can't see any ramblers though

on ran along at about 12 frames per second on our 040 A4000. According to the developers the game is perfectly playable at any speed above 6 fps. You should be able to milk that sort or performance out of an 030 processor with 4Mb of Ram. The game supports PPC and pretty much any graphics card you'd care to mention

This really is the sort of game the Amiga needs at the moment. It looks as though it is going to be fantastic in its own right but it'll also be a showcase for the sort of games you can create for the machine and set a standard for other developers to aspire to. The release date is in August so upgrade your machine and



Crashed! Time to pick another plane

SOLUTION

ACVENCU

Part two of our Big Red Adventure cheat guide

The story so far - Doug has just completed two of the three questions he needs to enter the KGB TV quiz show.

The Park

Go back up to your hotel room and retrieve your computer. Walk off to Gorky Park with the computer - in the centre of the park you will find a small boy. He's playing a cheap hand held Russian game console. Swap your expensive computer for the cheapo console and wander off...

When leaving Gorky Park you will talk to a street hustler trying to sell you a knocked off watch. Don't buy it but remember where you saw him for future reference. Head off to the railway station and find the cash point machine. Stick the console cartridge into the card slot and you will be allowed to withdraw 100 roubles.

You will come back to the station later in the game, but for now head back to the park after noticing the KGB TV building is next to the station. On your way to the park, stop by the huge queue and talk to the man with the big beard. Ask him to buy a tin of caviar in return for a loo roll. Go back to the park and buy some bog roll from the street peddler this will cost you the 100 roubles from the cash point.

Once you have the loo roll, head back to the queue to swap it for the tin of caviar. Now examine the tin to find the answer to the final question on the free ticket. There aren't any Rs on the label! Now that you know all three answers, go straight back to the hotel foyer.

Once you arrive back at the hotel lobby, go up to the porter and ask to borrow a pen to fill in the ticket. Select the ticket to fill it in and then put the ticket in the envelope in your inventory, using the pen to fill out the address. Next, select the stamp from your inventory in order to post the ticket correctly.

Leave the hotel and go to the KGB Studios, located next to the Rail Station. When you get there, post the letter. Now rush back to the

hotel and ask the porter if there's any mail for you. He will now hand you your reply from the Studio.

Open the reply and discover an invite to The Russian Doll Show and the tickets. Don't waste time, get over to the KGB Studios and hand in the ticket to the receptionist. She give you a badge and directs you to studio five for the show. When you arrive you will be po straight on air.

There are three questions about thieves to answer and, if you answer them correctly, you go on to answer the big question and win an air balloon. If you didn't answer all the questions correctly, you can still get through the game - just follow our handy hints:

If you win

Go back to the hotel room and enter the toilet after collecting your prize and adding the studio lights to your inventory. This leads to a new scene high above the city in your air balloon. Fly to the museum and land on the roof. Once inside the museum, go to the crown room and switch on the lights near the crown. This blocks out the photo cells and stops the alarm going off.

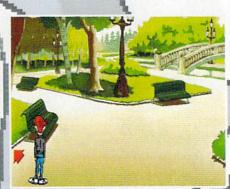
Now go into the next room and combine the cassette with the recorder and use it. This



Wow, Big Red Adventure made me laugh



Buy the mags, you'll find them all useful



Doug Loiters in the beautiful Gorky Park



Time for some cash point fraud

will blast out the wonderful sounds of opera, breaking the glass cases in the process. Now pick up the ring and computer and go into the crown room.

Select the diamond ring and use it on the crown case to cut a hole in the glass. The crown is now ready to be snatched but unfortunately not by you another thief suddenly appears and snatches the crown from under your nose

You end up in your hotel room again, with your picture in every newspaper in Mosi You have to get the out of here, but how? Firstly, go to the newsagents and buy a copy of Consolphobia magazine. Examine it and find that the pass





Doug tries his charms on the receptionist

word for the Trotsky's mainframe computer is the name of the tenor who sings with Donna Catale the Bolshoi. Leave the hotel

and head down to the burger place where you meet some dodgy friends, Alex and Kos. They tell you that they have a plan to break into the Trotsky software mainframe and that they want you to do it. In return they will give you a passport so you can leave Moscow before you're arrested.

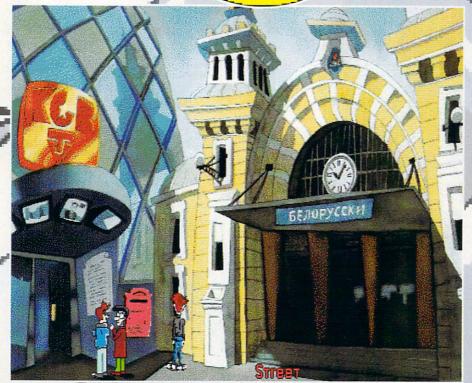
They go on to tell you that the mainframe computer is on the World-wide Communication Network and that their e-mail address is Lenin.Komm. Head back to your hotel room and combine the TV remote control with the tape recorder and then attach that to the ZX81.

You now have to find the mode number for the WWC Network. To do this, go to the KGB Studios and examine the reception desk to find a scrap of paper. Look at that piece of paper to gain the Internet address for the WWC Network, which is KGB.NET 007 6 1 0.

Now you can use it on the telephone in your hotel room to get the tape recording for Alex and Kos. Take the tape to Alex and Kos to get your passport and then head swiftly to the station and show your passport to the guard in order to board the Orient Express and get the hell out of there!

If You Lose The Quiz

You win a consolation prize of a keyring and you are left in the studio. Pick up the studio lights and use the keyring on the doll's head in order to enter a secret passage leading to the museum. Once inside the museum, go to the crown room and switch on the lights near the crown. This stops the alarm. Now go into the next room and combine the cassette and the recorder and then use it. From this point on, follow the procedures laid out in the 'If You Win' solution.



The KGB Studios

ACTION REVIEW FEATURE

DUKE NUKEM 3D Engine Let's hope we see more of

t's hope we see more of Duke on the Amiga

Duke on the Amiga? Well, nearly...

You're either a dog person or a cat person. You either like the Rolling Stones or The Beatles. You're a Quake fan or a Duke fan. It's just one of those things, you can't like both.

Whereas Quake has always won fans because of its dark, sinister graphics and atmospheric sound effects, Duke is a lighter, airier, more tongue in cheek shoot 'em-up.

The game has won legions of fans because of its fun, slightly tasteless take on the 3-D shooter. Your Ray Bans and machine gun toting hero spits out witty quips and one liners as he dispatches hordes of furry aliens and innocent bystanders alike.

The weapons he uses to do this differ from the rather serious Quake armoury by including a number of bizarre and downright stupid guns and bombs. The self explanatory Shrinker Ray for example,

reduces the enemy to the size of an action man so you can defeat him just by stomping on him.

Getting Duke Nukem 3D (and Quake) onto the Amiga has been something of a Holy Grail to Amiga developers – and now, both have been successfully ported. A few weeks ago, Amiga enthusiast John Selck

announced that he had ported the Duke Nukem 3D games

> engine over to the Amiga. Obtain a PC copy of Duke Nukem, pinch the group files and hey presto, you can wander about any

Duke level at will. There's nothing to shoot and it isn't a game by any standards but it paves the way for greater things.

For a start it will convince those who thought otherwise that a PC game can work on an Amiga. Unlike the ported Amiga Quake (which ran so slowly you could see each and every bullet plod towards you at snail like speed), Duke ran on the on the office 040 A4000 at a perfectly smooth speed. However, the Duke walkthroughs don't contain any enemies, which is apparently the most system hungry single element of most games.

At the moment nobody knows whether the Duke engine will be developed any further. Although it is a fair bet that every major Amiga developer will be interested in a full port of Duke to the Amiga, the legal problems that haunted the Quake port could still trouble Duke.

However, with 3-D shoot 'em-ups proving to be a popular project for Amiga games developers, how long will it be before the platform has its own answer to Duke or Quake on the PC or Marathon on the Mac? If some of the new projects emerging come to fruition, such as Genetic Species or Brainkiller, the answer would have to be, not long...



As you can see, even in low res mode the Duke play environment looks fantastic



The walkthroughs run at a tremendous speed



By pressing the delete and help keys you can fly through the levels...

FLIGHT SIMULATOR

Hugh Poynton fiddles with his chopper (stock helicopter joke 1243...)

Six years ago, you'd be forgiven for thinking that Microprose made nothing but flight sims. Retired Air Force colonel 'Wild' Bill Stealy seemed to be amassing his very own digital airforce. Any new game entering into the fray would have to be exceptional to have been noticed. Which is exactly what Gunship 2000 was.

Mixing the Microprose attention to detail and realism with the need for a fast and furious game, the chopper sim offered players the opportunity to fly one of six different helicopters in combat in six combat zones.

The six helicopters - the Blackhawk, Jetranger Kiowa, Hughes Defender, Apache, Commanche and Cobra all have different strengths and abilities. Each chopper denotes a different type of mission. Pick the Blackhawk and you'll be doing a search and rescue mission, pick a Jetranger Kiowa and you'll be doing recon. All the others are ideally suited to blowing the crap out of things.

To give the game an additional element of challenge, you must attain certain ranks before flying certain helicopters like the Com-



As you can see the attention to detail is excellent - all those dial things do stuff! manche or Apache Longbow. Likewise, only two combat zones, the Gulf and Western Europe, are open to you until you have proved yourself in battle.

The graphics are, even by modern standards, excellent. Although lacking in texture mapping or detailed voxel landscapes.

> Gunship 2000 uses thousands of different tiles to create an

arena. Because most of the action takes place at tree top level, the ground detail is superb, follow a road to you target destination and telegraph poles will flash past your helicopter.

The whole thing is very realistic and well thought out. Copyright protection, for instance, is weaved into the game. You've got to feed the correct numbers into your GPS system before you can get the helicopter off the ground. Unlike other sims of the time, Gunship also allows you to direct other units to the target so you can end up co-ordinating a big task force to the required area.

This attention to detail and the huge amount of options available means the game retains its long term appeal; no matter how

The main options screen allows you to pick the helicopter and the ordinance it will carry

good you get, there will be still more to accomplish. Unlike its contemporaries, ThunderHawk and LHX, the game could take months to complete because once one helicopter and combat environment is mastered, there are dozens more to try. Get good enough at Gunship and you'll be flying a state of the art Commanche. In addition to this, difficulty levels can be toggled so there are unevenly contoured playing an adverse weather conditions and highly trained enemies to overcome.

> Although probably not the game of choice for somebody who wants rather more arcade oriented action, Gunship 2000 is an excellent challenging and very absorbing sim. If you're a propeller head, go buy it.

THE LOW-DOWN

PUBLISHER Guildhall **PUBLISHER** Microprose **CONTACT 01302 890000 PRICE** £14.99 DISKS 4

GRAPHICS	92%
SOUND	90%
PLAYABILITY	92%
DIFFICULTY	Tricky

OVERALL SCORE

ADVENTURE

sixth Sense

Hugh Poynton investigates Epic's new point 'n' click

Sixth Sense Investigations is the latest offe ing from Epic. As you might remember, Epic has decided to start releasing continental games in the UK and new releases from European developers. This offering comes from the home of dodgy bank accounts and the Milka Cow, Switzerland.

CineTECH, the developer behind Sixth Sense Investigations, has apparently taken its inspiration from the classic LucasArts

point'n'click adventure games such as Mon-key Island. Presented in a suitable cartoon style, the game follows a crazy young guy who has the ability to communicate with the spirit of a sarcastic man. A friend (who thinks of himself as a detective) profits from these psychic abilities. Quite predictably this leads them into crazy, funny situations which don't help in their quest to make money. All of which goes towards making the game sound utterly tedious.

Everything looks your sign. The marking

Everything looks very nice. The graphics are bubbly and colourful and the characters and scenery all capture the attention. The main protagonist – the crap detective – looks suitably crap. Hunched over, hands in Mac he looks like a cross between the double entendre laden detective from the Robinson's ad and Tosh Lynes from the Bill in mouth, he scurries from crime scene crime scene.

The various locations are fun - there's the rich American's Cheese Production Facility, a mad professor's laboratory and a toy fac-tory. The finished game will boast 32 different location on three different worlds so there should be a fair amount of depth to the game.

There are some nice little touches - the point and click action commands such as "pick up" and "talk" are all messily scrawled across the bottom of the screen on what looks like a strip of lined paper from a note book with ink spots aplenty. The music puts you in mind of a bungling detective (Imagine the **Detectives tune crossed** with the Inspector Clueseau theme).

The game ru office's 020 A1 problem and the around the screen ines. According to game characters z like rabbits on am version of the CineTECH, the fu vay on any A1200 game will ha or 4000 with d a CD-Rom

Pleasant though the game looks and plays, there are a few drawbacks. Firstly, it will cost £29.99 – a lot of moolah to

shell out for a game. To be totally honest, Sixth Sense Investigations doesn't look as if it is worth £29.99 it doesn't have the same wry humour or characterisation as Big Red Adventure and, more importantly, just doesn't look of the same standard. If point 'n' clicks are your cup of tea, give this game a go. If not, keep your wallet in your pocket.



The Private Detectives chaotic office - still it isn't as messy as the AC offices!



This is the Private Dicks stomping ground, a wretched den of scum and villainy



At the toy factory Private Dick quizzes a suspect who rants on about giant toys in pyjamas – nick him for possession!

REASONS TO BE CHEERFUL

In these 'interesting' times for the Amiga computer, HiSoft would like to express its total commitment to the Amiga and its users. And what better way than offering you the best software and hardware products at unbeatable prices!

Squirrel Prom

The Classic Squirrel and the Surf Squirrel have revolutionised the way you use your A1200 and A600 computers, making it possible to add up to 7 SCSI devices such as hard drives, scanners, Zip drives, CD-ROMs etc. With SCSI you get a complete, easy-to-fit and easy-to-use system that is fast, reliable and expandable. And now it's even more affordable than ever!

As the developers of the famous Squirrel SCSI interfaces we have been able to shave margins to the bone and bring some unbeatable CD-ROM deals. Just look at what you get in each of our great Squirrel CD-ROM packs:



- Choice of internal or external CD-ROM drive.
- ✔ Choice of 2-speed, 4-speed or 12-speed drives.
- Choice of Classic Squirrel or Surf Squirrel interfaces.
- Choice of 3 FREE CD titles to get you started.
- Power lead and cables where appropriate.
- ✓ Full manuals on how to set up and use your new equipment.
- Extensive after-sales support, direct from HiSoft.

All you have to do is pick up the phone and call our friendly sales staff, free of charge - we will advise you on the best choice for your system and put together the best Squirrel CD-ROM pack you can buy.

Squirrel CD2X (Classic Squirrel, 2-speed External CD-ROM, choice of 3 FREE CDs*)	£99.95
Squirrel CD4X (as CD2X but with fast quad-speed CD-ROM)	£149,95
Squirrel CD12X (as CD2X but with ultra-fast 12-speed CD-ROM)	£239.95
Surf Squirrel Option (faster SCSI plus ultra-fast serial interface)	+£30.00
Internal Option (for fitting in tower case or your own case)	-£35.00

*Current CD titles include AGA Experience 2, Global Amiga Experience, Grandslam Gamer Gold, Sweet Touch, Women of the Web & The Kara Collection

£99⁹⁵

2-Speed CD-ROM Classic Squirrel 3 CD Titles

Squirre!

The revolutionary Zip drive from lomega is one of the major technological developments of the 90s, and it works perfectly on your Amiga with HiSoft's tailor-made Squirrel Zip kit.



SQUIRREL ZIP100 PACK

The complete Zip100 pack for any SCSI-aware Amiga computer:

- Zip Drive including 1 cartridge with PC/Mac Zip Tools, 25-way to 25-way SCSI lead, manuals etc.
- HiSoft Amiga Zip Tools software with Amiga-specific user manual.
- Special 25-way to 50-way converter for use with Squirrel SCSI or other SCSI peripherals.

£149⁹⁵ -

£189°

with Classic Savirrel

bjc 4200 CANON

This amazing-value printer allows truly stunning photo-realistic quality, with no banding, when used with the Canon Studio software package.

This pack includes printer, Amiga printer lead, Canon Studio and free photo-realistic cartridge offer.

£24995

Goodies GALORE

Cinema4D CD Edition £199 99 The Whippet £49.95 Megalosound £29.95 Clarity 16 Sampler ProMIDI Interface £24.95 Media MAGIC Maxon MAGIC £39.95 £19.95 Disk MAGIC 2 £29.95 Twist 2 database £69.95 Termite Comms TermiteTCP £29.95 IBrowse 1.11 £29.95 Net&Web 1 £29.95 Net&Web 2 £59.95 Web Explosion CD £44.95 Personal Paint 7.1 CD Devpac 3 Assembler £49.95 HighSpeed Pascal £69.95 Studio 2 £44.95 ProFlight SMD-100 & 4 VideoCDs

Enterprise NET&WEB

Confused by all the hype about the internet? We're not surprised. But here is the no-nonsense, quickstart pack that contains all you need to connect, to send and receive email, to transfer files, to access those essential newsgroups and to browse the world wide web. The brand-new Enterprise Net&Web pack is a breeze to install and a joy to use - here's what you get:

ENTERPRISE NET&WEB PACK

- ✓ 33.6bps Fax/Voice Modem cream
- ✓ Modem & telephone leads
- ✓ Easy install program
- Free 30-day trial account with Demon Internet
- ✓ Net&Web Software FTP file transfer HiSoft Mail email IBrowse browser Usenet newsreader

minni

ENTERPRISE -NET&WEB+ PACK

Everything in the Enterprise Net&Web Pack (see left) plus

- TermiteTCP, software that supports ppp for connection to any service provider.
- Amiga Surfin' Book, full of invaluable info on the internet.

£12995

HISOFT SYSTEMS

The Old School, Greenfield, Bedford MK45 5DE, UK tel +44 (0) 1525 718181 • fax +44 (0) 1525 713716 www.hisoft.co.uk • www.cinema4d.com TO ORDER CALL 0500 223 660

Call free (within the UK) to order any HiSoft product, using your credit/debit card. We accept Mastercard, Visa, Switch, Delta, American Express etc. at no extra charge. Carriage is £3 for software, £4 for hardware (2-3 day service) or £6 for guaranteed next day delivery (for goods in stock). All prices include UK VAI. Call, fax or email us for export prices. We also accept cheques, POs and official purchase orders.

HiSoft 1997. E&OE.

Squirrel



Make my own CDs? No, too expensive. Well, not any more with the brand-new SquirrelCDR system. Combining a brilliant, 2-speed write, 6-speed read CDR drive with the excellent commercial version of MakeCD, the SquirrelCDR system is unbeatable - just look at what you can do:

- ✔ Backup 650MB of hard disk in under 40 minutes.
- ✓ Write up to 100 sessions per disc.
- Create your own multimedia discs.
- ✔ Create your own music discs.
- Back-up CD-ROMs.
- Back-up audio discs.
- Back-up console games.
- Play CD32 discs.
- Play audio discs.
- Back-up ANY compact disc!
- ✓ Create Mac / PC discs on your Amiga.
- Create mixed audio / data discs.
- Create bootable CD32 discs-perfect for demos!
- ✔ Play CD-ROMs at 900kB per second.
- Access all sessions of a PhotoCD.

Ideally suited for the Squirrel SCSI interfaces on the A1200, the SquirrelCDR will also work on most SCSI-aware Amigas.

SquirrelCDR XL (external drive, MakeCD, Surf Squirrel, 5 gold disks) £469.95 SquirrelCDR GT (ext drive, MakeCD, 5 gold disks, w/o SCSI i/face) £399.95 Squirre|CDR | (internal drive, MakeCD, 5 gold disks, w/o SCSI i/face) £349.95 MakeCD (full version with manual, for private use) £39.95

£4.95 Gold Disk (fully warranted, 650Mb capacity)

cinema4.

We are delighted to announce the immediate availability of the CD Edition of the acclaimed CINEMA 4D raytracing package. The CD Edition includes a brand-new version of CINEMA 4D, many more textures, scenes and objects (>200 predefined materials, >400 bitmap textures) and, as a special FREE bonus, CinemaWORLD and CinemaFONT are included!

For those who already know CINEMA 4D, here are some of the new features:

- ✓ 68060 support render up to 100% faster.
- New Material Manager inc material previews.
- Materials now support colour, luminance. transparency, reflectivity, environment, fog, bump mapping, genlocking, highlights and highlight colouring as separate attributes.
- Unlimited number of materials on an object.
- Lighting system supports visible light, lens flares, glows, reflections, soft and hard shadows, conical, parallel, decreasing and fixed intensity light.
- Camera supports depth of field blurring and lens adjustment to allow fisheye, wide angle or telephoto lenses.
- Internal CyberGraphX support.
- ✓ Palette sharing on 256 colour screens.

CINEMA 4D has a long history on the Amiga, being used all over the world by graphic studios, architects, television companies and enthusiastic amateurs. Now its pedigree has been realised by the Macintosh and PC world who have raved about it (93% - MacFormat). Call us for a special cross-platform price.

UPGRADE PRICES

Ver 2 to CD Edition £69 Ver 3 to CD Edition £29

Whipp

The Whippet is a fully buffered, ultra high speed serial port capable of performing up to 400% faster than the A1200's serial port. Data transfers with The Whippet are guaranteed to be much faster, much safer and much more reliable than when using the standard Amiga serial port.

The Whippet really comes into its own when surfing the Internet. High speed drivers allow the use of web browsers, ftp clients, email clients, usenet readers and other Internet tools, all at the same time without loss of data—and with multitasking!

COMPATIBLE WITH

- All Amiga networking software.
- All Amiga Internet software.
- All Amiga communications software.

FEATURES

- High performance serial port, up to 400% faster than the Amiga serial port.
- The Whippet is fully buffered for safer and reliable data transfer.
- Up to 230,000 bps data transfer rate.
- Industry standard 9-pin serial socket.
- 9-pin to 25-pin modem lead included.



As a special thank you to all the loyal Amiga Computing readers, we are offering a 5% extra goodbye discount on all products advertised on this page and in our other ad (previous page). Just multiply all prices (except carriage) by 0.95 to get your special, low price. Please quote ACBB32 when ordering. Offer closes 30 September 1997.

TO ORDER

You can order over the telephone on our FreeCall number 0500 223 660 using any popular credit or debit card or you can send us an order through the post with a cheque/postal order. See our ad on the previous page for more details.

Or order on our webpage... ww.hisoft.co.uk

The world famous Blizzard 1230/IV 50MHz accelerator board is now available from HiSoft at a new, even lower price. Trust HiSoft to bring you the best Amiga products at truly affordable prices and with full technical support from Amiga experts.

This is the highest performing 68030 expansion you can buy for your A1200 and we can now offer it with a range of options to give you maximum choice - whichever way you go, you can be assured of top quality, fully warranted products with complete after-sales service from HiSoft.



TIME

Blizzard 1230-IV (OMb, 50MHz 68030 & MMU, 32-bit Fast RAM, expandable up to 128/256Mb)

£99.95 £119.95 Blizzard 1230-IV 4Mb (fast, 60ns SIMM included, fitted) £139.95 Blizzard 1230-IV 8Mb (fast, 60ns SIMM included, fitted) £169.95 Blizzard 1230-IV 16Mb (fast, 60ns SIMM included, fitted) 50MHz FPU Co-Processor (when purchased with 1230-IV) £29.95

> BLIZZARD GOLD PACK

Blizzard 1230-IV 8Mb & FPU & Surf Squirrel £229.95!!

Bye-bye Amiga Computing from all of us at HiSoft See you in the future?























